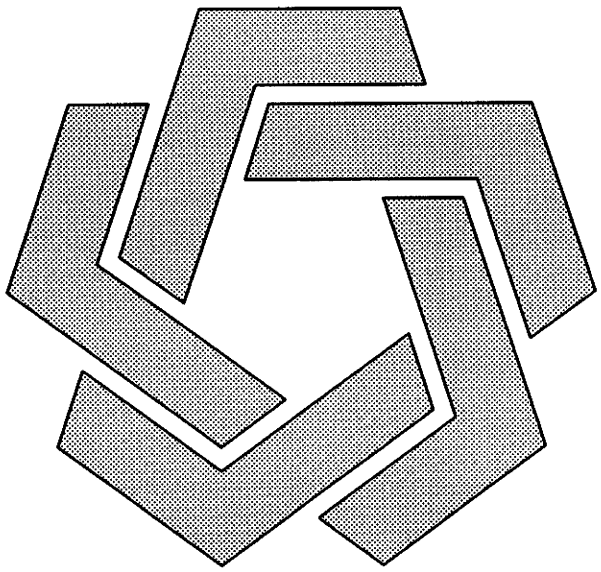
STATE DECISION PACKAGE

SUNNYSIDE COGENERATION ASSOCIATES
SUNNYSIDE REFUSE AND SLURRY
ACT/007/035

PERMIT



STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FEBRUARY 4, 1993

UTAH DIVISION OF OIL, GAS AND MINING
STATE DECISION DOCUMENT

Sunnyside Cogeneration Associates
Sunnyside Refuse and Slurry
Permit
ACT/007/035
February 4, 1993

CONTENTS

ADMINISTRATIVE OVERVIEW
SUNNYSIDE COGENERATION ASSOCIATES
SUNNYSIDE REFUSE AND SLURRY
ACT/007/035
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Background

This cogeneration project, then Sunnyside Fuel Corporation, first submitted an application for a permit transfer on April 15, 1988. On August 31, 1988, the Division Director sent a letter to Environmental Power Corporation stating that the permit must be a stand alone document. By September 7, 1988 the draft "stand alone" document was submitted. Permit deficiencies were sent to the permittee, and responded to, but no reclamation bond was ever posted.

On August 23, 1990 Mr. Fred Finlinson, representative for Environmental Power Corporation, sent a current draft of the proposed Operating Agreement between Sunnyside Cogeneration Associates (SCA) and Sunnyside Reclamation and Salvage (a predecessor to Sunnyside Coal Company). A meeting was held at the Division on May 14, 1991 to discuss the status of the Sunnyside Cogeneration Project and the need for a timely submittal to allow for adequate review and approval.

On May 15, 1992, Sunnyside Coal Company submitted a response to a Division Order requesting that the contemporaneous reclamation of the coarse refuse area be amended to allow for the use of the coarse refuse as feed for the Sunnyside Cogeneration plant. However, the Division was unable to respond, because in approving the Division Order, the coarse refuse pile could be used as feed for the cogeneration plant.

On August 20, 1992, Sunnyside Cogeneration Associates submitted an application for a permit transfer with the permit changes for the mining and reclamation plan. On September 10, 1992, the Division sent a letter to SCA stating that a new permit would be required instead of a permit transfer. Additionally, on September 21, 1992, the Division sent a letter clarifying that the activity on the refuse and slurry piles would be considered "mining, not "remining".

A completeness deficiency document was sent on October 21, 1992. A meeting was held at the Division that same day with Dianne Nielson, Division Director, Lowell Braxton, Division Associate Director, Fred Finlinson (CDN), and Alane Boyd (EWP), and Pamela Grubaugh-Littig, Permit Supervisor, to discuss completeness deficiencies, the need for the test burn and exploration permit. The plan was determined complete on October 28, 1992.

On November 20, 1992 a meeting was held at the Division with Alane Boyd (EWP), Brian Burnett (CDN), and Pamela Grubaugh-Littig, (DOGM) in which the need for a detailed mining plan was stressed (the John T. Boyd report), as well as the payment of AML fees and the requirement for a surety bond were discussed. On November 25, 1992 a technical deficiency document was sent to Mr. David Pearce (SCA). On December 3, 1992 the technical deficiency response was received. A meeting was held at the Division on December 18, 1992 with Fred Finlinson (CDN), Brian Burnett (CDN), Alane Boyd (EWP), Dianne Nielson (DOGM), Lowell Braxton (DOGM and other technical support staff. At this meeting, Division administration agreed upon stipulations for the SCA plan and information that must be submitted by January 8, 1993. A December 21, 1992 telephone conversation between Lowell Braxton (DOGM) and Alane Boyd (EWP) further agreed to the stipulations for the plan.

A partial submittal of response information was submitted January 8, 1993 and the remainder was received January 12, 1993. An irrevocable letter of credit was submitted to the Division on January 26, 1993. During the week of January 25, 1993, the technical staff prepared the permit conditions for the SCA plan. Information that could be handled immediately, minor text and editorial comments, were faxed to EWP for change during the week of January 25, 1993 also.

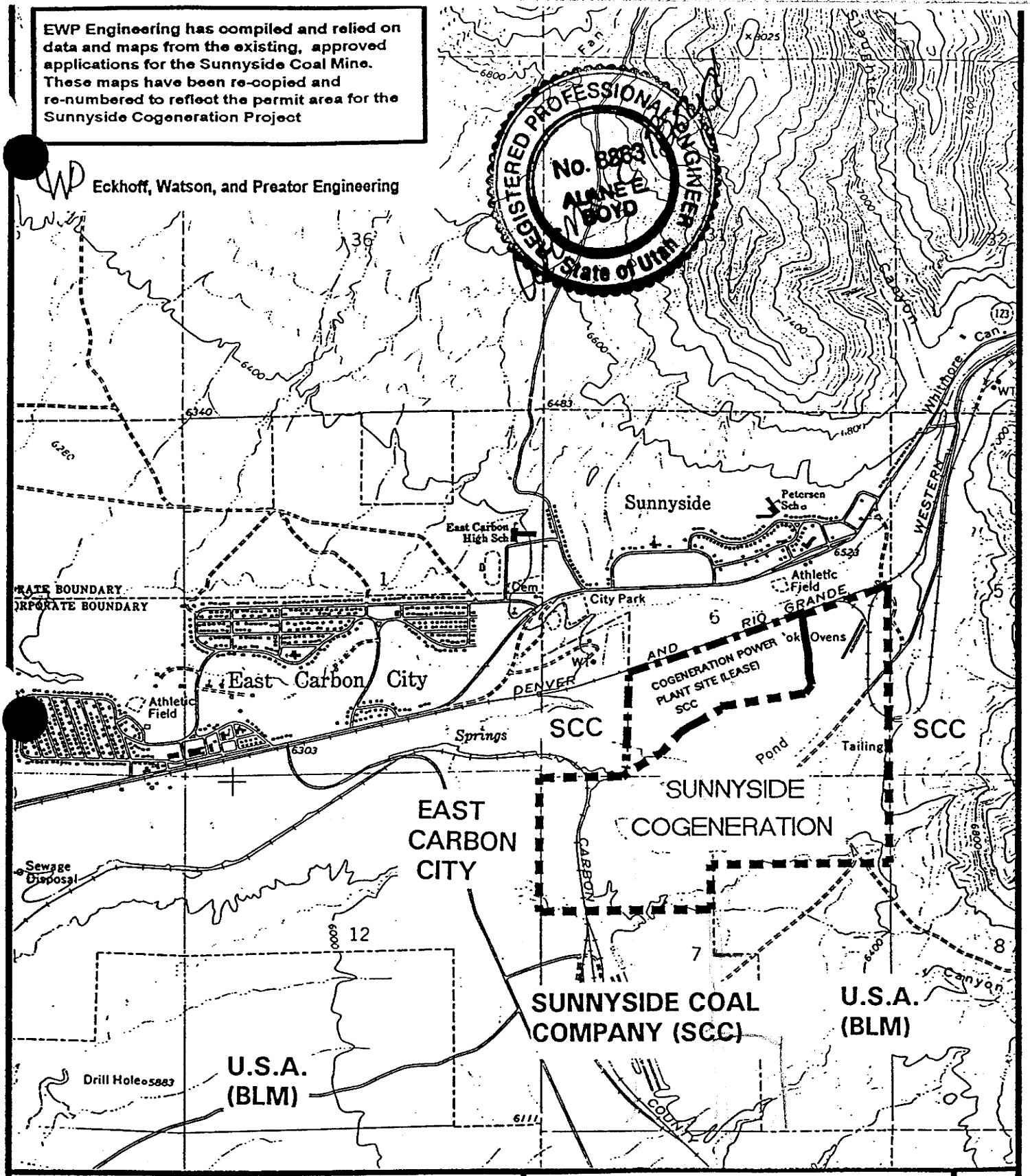
Editorial changes were submitted to the Division on January 29, 1993. The 510 (c) for the Applicant Violator System was run on February 1, 1993 and a permit "deny" was issued. On February 2, 1993 the information relating to the problem, (one of the directors, Mr. William Dimeling, President of Great Eastern Coal Corporation, had 32 pages of unpaid fines), was faxed to Callister, Duncan, and Nebeker. On February 3, 1993 a letter of resignation from Mr. Dimeling and a letter from the Secretary of the Corporation stating that the letter of resignation was accepted, was faxed to the Division, along with the articles of the Corporation that state the resignation can be accepted immediately. A revised 510 (c) was run and the AVS stated "issue".

The permit was issued on February 4, 1993 with twenty conditions.

EWP Engineering has compiled and relied on data and maps from the existing, approved applications for the Sunnyside Coal Mine. These maps have been re-copied and re-numbered to reflect the permit area for the Sunnyside Cogeneration Project

Eckhoff, Watson, and Preator Engineering

REGISTERED PROFESSIONAL ENGINEER
No. 8863
ALANE E. BOYD
State of Utah



SUNNYSIDE COGENERATION

SUNNYSIDE, UTAH

REVISIONS		
NO.	DATE	BY
1		
2		
3		
4		

SURFACE OWNERSHIP

DRAWN BY S.L.O.	DATE 3/15/88
CHECKED BY	DATE
APPROVED	SCALE 1"= 2,000'

A-2

Sunnyside Cogeneration Associates
Sunnyside Refuse and Slurry
Permitting Chronology
ACT/007/035

April 15, 1988	Application for Permit Transfer, Sunnyside Fuel Corporation.
August 31, 1988	Dianne Nielson (Division Director) sends letter to Mr. Robert Barton of Environmental Power Corporation (EPC), stating that the permit must be a stand-alone document.
September 7, 1988	Draft stand-alone document is submitted.
November 23, 1988	Permit Transfer Deficiencies sent. No Bond posted.
August 23, 1990	Letter to Lowell Braxton (Division) from Fred Finlinson of Callister, Duncan and Nebeker (CDN)/representative for EPC, sends current draft of the proposed Operating Agreement between Sunnyside Cogeneration Associates (SCA) and Sunnyside Reclamation and Salvage, Inc. (SRS, Inc.)
May 14, 1991	Meeting held with Robert Barton (EPC), Caroline Skukzeski (CDN), and Dianne Nielson, Lowell Braxton, Pamela Grubaugh-Littig (Division) to discuss the Sunnyside Cogeneration Project. Suggested submitting information to Division in a timely manner to allow time for adequate review and approval.
September 6, 1991	Letter sent to David Pearce (EPC) relaying need to contact Division soon to avoid any delays in the permit process.
December 10, 1991	Jan Bergeson (CDN) requests copies of the EPC NOV information from the Division.
May 15, 1992	Sunnyside Coal Company (SCC) submits a response to a Division Order requesting that the contemporaneous reclamation of the coarse refuse area be amended to allow for the use of the coarse refuse as feed for the Cogeneration plant. The Division is unable to respond because in approving this Division Order, it could mean approval of the coarse refuse pile as feed and subsequent use of the pile.

August 20, 1992	SCA submits an application for a permit transfer with the permit changes for the mining and reclamation plan.
September 10, 1992	The Division sends a letter to SCA stating that a new permit will be required instead of a permit transfer.
September 21, 1992	Division letter clarifies that SCA's activities will be "mining" not "remining".
October 21, 1992	Completeness deficiency document sent. Meeting held at the Division with Dianne Nielson, Lowell Braxton, Fred Finlinson, Alane Boyd of Eckhoff, Watson and Preator (EWP) and Pamela Grubaugh-Littig to discuss completeness deficiencies. Division Director set parameters for completeness at meeting. Also discussed the need for test burn soon and/or exploration permit.
October 28, 1992	Determination of Completeness.
November 6, 1992	EWP updates Chapter 1 and 2.
November 12, 1992	EWP submits some of the pond calculations.
November 20, 1992	Meeting with Alane Boyd (EWP), Brian Burnett (CDN), and Pamela Grubaugh-Littig, discussed need for detailed Mining Plan, AML fees, and Surety Bond based on reclamation plan. More pond calculations submitted.
November 25, 1992	Technical Deficiency Document sent to David Pearce.
December 3, 1992	Technical Deficiency Response received.
December 18, 1992	Meeting at the Division with Fred Finlinson (CDN), Brian Burnett (CDN), Alane Boyd (EWP), Deren Li (EWP), Jessica Smith (EWP), Randy Wahlen (EWP), David Pearce (SCA), Dianne Nielson, Lowell Braxton, Hugh Klein, Ken Wyatt, Susan White, and Jesse Kelley to discuss Technical Deficiencies.
December 21, 1992	Lowell Braxton and Alane Boyd agree on stipulations per a telephone conversation.

January 8, 1993	Partial submittal of updated PAP material.
January 12, 1993	Letter outlining the response to the deficiencies of December 18, 1992, updated text, and maps submitted to the Division.
January 21, 1993	EWP submits a list of "agreed upon" stipulations to the Division.
January 26, 1993	Brian Burnett (CDN) submits Irrevocable Letter of Credit and Reclamation Agreement.
January 26-28, 1993	Editorial comments are faxed to EWP for correction.
January 29, 1993	Editorial comments submitted to the Division.
February 1, 1993	A 510(c) clearance was run. The Applicant Violator System (AVS) issued a "deny" due to the fact that one of the directors had 32 pages of unpaid fines.
February 2, 1993	The information relating to the "deny" was faxed to Brian Burnett.
February 3, 1993	A letter of resignation for one Mr. Dimeling, the Director who caused the "deny" on the AVS was faxed to the Division, along with the acceptance by the Secretary of the corporation as well as the bylaws for the corporation that outline the immediate effectiveness of the resignation.
February 4, 1993	A revised 510(c) was run with an "issue". The permit was issued with twenty conditions.

jbe
SCACHRO

MINING PLAN INFORMATION

Mine Sunnyside Refuse & Slurry County: Carbon

Permit ID ACT/007/035 (X) New ( ) Revision ID

Permittee Sunnyside Cogeneration Associates

Address P.O. Box 58087, Salt Lake City, Utah 84158-0087

Official & Title Mr. David Pearce,

Proposed Operations

(X) Surface ( ) U/G Mining Method(s) Excavation (Surface)

Coal Seam(s) to be Mined: N/A

Seam Name	Coal Thickness(es)	Seam Depth
Coarse Refuse		
Slurry Ponds		
(Fine Refuse)		

Surface Ownership (Acres)	Existing Permitted Area	Proposed Add'l Permitted Area	Total Mine Permitted Area
Federal	0	0	0
Non-Federal	0	318	318
Coal Ownership			
Federal Lease(s)		*	
Unleased Federal			
Non-Federal			
TOTAL Acres			
Disturbed Acres	0	170	170
Minable Coal (Tons) (Coarse Refuse & Fine Refuse)			
Federal	0	8,814,000	8,814,000
Non-Federal N/A	0	0	0
TOTAL Tons	0	8,814,000	8,814,000
Years Remaining	0	20	20

Ave Annual Prod 410,000 **Year Mining Ends** 2013

* Attach Legal Description of Leased Federal Coal within Proposed Permit Area

Non-Federal

FINDINGS
Sunnyside Cogeneration Associates
Sunnyside Refuse and Slurry
ACT/007/035
Carbon County, Utah
February 4, 1993

The application submitted by Sunnyside Cogeneration Associates proposed to conduct mining and reclamation operations on a portion of an area presently approved under the Utah Coal Regulatory Program as permit number ACT/007/007. In the review of the Sunnyside Cogeneration Associates application, the Division of Oil, Gas and Mining Evaluated and accepted, where applicable, information from approved permit ACT/007/007 for incorporation into the Sunnyside Cogeneration Permit Application Package. The Division of Oil, Gas and Mining also required submission of additional information to respond to the changes in operations proposed by Sunnyside Cogeneration. On this basis the Division of Oil, Gas and Mining now finds:

1. All procedures for public participation required by the Act, and the approved Utah State Program have been complied with (R645-300-120). (See copy of affidavit of Publication dated November 19, 1992.)

2. Division administration premised the permit review on information contained in the current Sunnyside Coal Company PAP. Conditions of the permit reflect the fact that on-site surveys of the permit area will be conducted and completed to reflect accurate information for inclusion in the Sunnyside Cogeneration Associates PAP. (R645-300-133.100)

3. The proposed permit area is:

   (a) not included within an area designated unsuitable for underground coal mining operations;

   (b) not within an area under study for designated lands unsuitable for underground coal mining operations;

   (c) not on any lands subject to the prohibitions or limitations of 30 CFR 761.11{a} (national parks, etc.), 761.11{f} (public buildings, etc.) and 761.11{g} (cemeteries);

   (d) within 100 feet of a public road (R645-300-133.220); and

   (e) not within 300 feet of any occupied dwelling (R645-300-133.220).

4. The Division has made an assessment of the probable cumulative impacts of all anticipated coal mining and reclamation operations on the hydrologic balance in the cumulative impact area and has determined that the proposed operation has been designed to prevent material damage to the hydrologic balance outside the permit area. The permit application has been designed to prevent damage to the hydrologic balance in the proposed permit area (R645-300-133.400 and UCA 40-10-11{2}(c}). (See CHIA)

5. The operation would not affect the continued existence of any threatened or endangered species or result in the destruction or adverse modification of their critical habitats as determined under the Endangered Species Act of 1973 (16 U.S.C. 1531 et.seq.) (R645-300-133.500). (See OSM letter dated January 22, 1993.)

6. The Division's issuance of a permit is in compliance with the National Historic Preservation Act and implementing regulations (36 CFR 800 and R645-300-133.600). (See letter from State History dated October 23, 1993.)

7. The applicant has demonstrated that reclamation as required by the State Program can be accomplished according to information given in the permit application. (See Permit Conditions)

8. The applicant has demonstrated that any existing structure will comply with the applicable performance standards of R645-301 and R645-302. (R645-300-133.720)

9. The applicant has paid all reclamation fees from previous and existing coal mining and reclamation operations as required by 30 CFR Part 870. A 510{c} report has been run on the Applicant Violator System (AVS), which shows that: prior violations of applicable laws and regulations have been corrected; Sunnyside Cogeneration Associates is not delinquent in payment of fees for the Abandoned Mine Reclamation Fund; and the applicant does not control and has not controlled mining operations with a demonstrated pattern of wilful violations of the Act of such nature, duration, and with such resulting irreparable damage to the environment as to indicate an intent not to comply with the provisions of the Act [R645-300-132 (OSMRE Relatedness Report dated February 4, 1993)].

10. The applicant has satisfied the applicable requirements of R645-302. (R645-300-133.740)

11. The applicant has filed a reclamation performance bond in the amount of $1,500,000 made payable to the Division.

Lowell P. Braxton, Acting Director

NON-FEDERAL

PERMIT
Permit Number ACT/007/035

February 4, 1993

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
(801) 538-5340

This permit, ACT/007/035, is issued for the state of Utah by the Utah Division of Oil, Gas and Mining (Division) to:

Sunnyside Cogeneration Associates
P.O. Box 58087
Salt Lake City, Utah 84158-0087
(801) 888-4476 or (617) 720-5550

for the Sunnyside Coarse Refuse and Slurry. An Irrevocable Letter of Credit is filed with the Division in the amount of $1,500,000, payable to the State of Utah, Division of Oil, Gas and Mining. The Division must receive a copy of this permit signed and dated by the permittee.

Sec. 1 **STATUTES AND REGULATIONS** - This permit is issued pursuant to the Utah Coal Mining and Reclamation Act of 1979, Utah Code Annotated (UCA) 40-10-1 et seq, hereafter referred to as the Act.

Sec. 2 **PERMIT AREA** - The permittee is authorized to conduct surface coal mining activities on the following described lands within the permit area at the Sunnyside Coarse Refuse and Slurry, situated near Sunnyside, Utah, and is accessible via State Highway 123 in the state of Utah, Carbon County, and located:

Township 15 South, Range 14 East, SLBM

PARCEL B:

Describing a parcel of land located in Carbon County, Utah, which is located in the east half of Section 6, Township 15 South, Range 14 East, Salt Lake Base and Meridian and being more particularly described according to the following courses and distances, to wit:

Beginning at the East one quarter corner of Section 6, Township 15 South, Range 14 East, Salt Lake Base and Meridian and running thence S 0°13'39" W, 1818.48 feet along the east section line of Section 6 to the south right of way line

of an existing railroad track; thence northwesterly along a curve to the right with a radius of 450.00 feet, through an angle of 83°37'47", for a distance of 656.83 feet having a chord that bears N 40°27'18" W, 600.05 feet; thence N 1°21'36" E, 68.00 feet along the westerly right of way line of an existing railroad track; thence S 57°11'02" W, 338.86 feet to an existing 5/8 inch rebar; thence S 66°14'45" W, 220.17 feet to an existing 5/8 inch rebar; thence S 86°11'30" W, 261.34 feet to a metal fence post; thence N 4°41'13" W, 264.09 feet to a roof bolt on the west side of a gate in a fence line; thence N 10°54'48" W, 189.49 feet to a metal fence post; thence N 0°39'10" W, 254.39 feet to a metal fence post; thence N 10°09'48" W, 315.48 feet to a metal fence post; thence N 6°32'57" W, 232.70 feet to a roof bolt in an existing fence line; thence N 6°32'57" W, 65.24 feet to the south right of way line of a Denver and Rio Grande Railroad as described in a certain deed dated July 29, 1912; thence N 71°27'00" E, 1209.07 feet along the south line of a 50 foot wide right of way for the Denver and Rio Grande Railroad; thence northeasterly along a curve to the left with a radius of 979.93 feet, through an angle of 9°19'48", for a distance of 159.57 feet, having a chord that bears N 66°47'06" E, 159.40 feet to the east line of said Section 6; thence S 0°13'39" W, 174.12 feet along the east line of Section 6, to the point of beginning.

Containing 42.316 acres, more or less.

PARCEL C:

Describing a parcel of land located in Carbon County, Utah, which is located in the south half of Section 6, Township 15 South, Range 14 East, Salt Lake Base and Meridian, and being more particularly described according to the following courses and distances, to wit:

Beginning at the southeast corner of Section 6, Township 15 South, Range 14 East, Salt Lake Base and Meridian which is a brass cap; and running thence N 89°57'59" W, 2646.97 feet along the south line of said Section 6 to the south one-quarter corner of said Section 6; thence S 89°27'59" W, 1321.87 feet along the south line of said Section 6 to the southwest corner of the SE1/4 SW1/4 of said Section 5; thence N 59°40'32" E, 666.58 feet to a metal fence post; thence N 44°13'50" E, 430.53 feet to a roof bolt; thence N 59°09'24" E, 167.86 feet to a metal

fence post; thence N 63°51'14" E, 188.19 feet to a metal fence post; thence N 60°15'43" E, 335.60 feet to a metal fence post; thence N 21°00'31" W, 34.15 feet to an east brace post in a barbed wire fence; thence N 81°18'59" E, 1270.98 feet along an existing fence line to a roof bolt; thence N 36°40'17" E, 152.88 feet along a fence line to a roof bolt; thence S 4°41'13" E, 264.09 feet to a metal fence post; thence N 86°11'30" E, 261.34 feet to an existing 5/8 inch rebar; thence N 66°15'45" E, 220.17 feet to an existing rebar; thence N 57°11'01" E, 338.86 feet to the west right of way line of an existing railroad right of way; thence S 1°21'36" W, 68.00 feet along the westerly right of way line of an existing railroad tract; thence southeasterly along a curve to the left with a radius of 450.00 feet, through an angle of 83°37'47", for a distance of 656.83 feet having a chord that bears S 40°27'18" E, 600.05 feet to a point on the east line of said Section 6; thence S 0°13'39" W, 818.01 feet along the section line to the point of beginning.

Containing 79.085 acres, more or less.

ALSO:

Describing a parcel of land located in Carbon County, Utah, which is located in the north half of Section 7, Township 15 South, Range 14 East, Salt Lake Base and Meridian and being more particularly described according to the following courses and distances, to wit:

Beginning at the northwest corner of Section 7, Township 15 South, Range 14 East, Salt Lake Base and Meridian, which is a brass cap; and running thence N 89°27'59" E, 1253.27 feet along the north line of said Section 7 to the northeast corner of the NW1/4 NW1/4 of said Section 7; thence N 89°27'59" E, 1321.87 feet along the north line of said Section 7 to the north one quarter corner of said Section 7; thence S 89°57'59" E, 2646.97 feet along the north line of said Section 7 to the northeast corner of said Section 7 to the northeast corner of said Section 7 which is a brass cap; thence S 0°15'54" W, 1322.37 feet along the east line of said Section 7 to the southeast corner of the NE1/4 NE1/4 of said Section 7; thence S 89°53'03" W, 2656.91 feet along the south line of the north one half of the northeast one quarter of said Section 7 to the southwest corner of the NW1/4 NE1/4 of said Section 7; thence S 0°41'30" W, 664.69 feet along the east line of the

SE1/4 NW1/4 of said Section 7 to the southeast corner of the NE1/4 SE1/4 NW1/4 of said Section 7; thence S 89°40'06" W, 2560.98 feet along the south line of the north one half of the south one half of the northwest one quarter of said Section 7 to the southwest corner of the NW1/4 SW1/4 NW1/4 of said Section 7; thence N 0°17'17" E, 1984.79 feet along the west section line of said Section 7 to the point of beginning.

Containing 197.987 acres, more or less.

Less a strip of land 200 feet wide for an existing railroad right of way lying in the west half of Section 7, Township 15 South, Range 14 East, Salt Lake Base and Meridian.

The permittee is authorized to conduct surface coal mining activities and related surface activities on the foregoing described property subject to the conditions of all applicable conditions, laws and regulations.

Sec. 3 **COMPLIANCE** - The permittee will comply with the terms and conditions of the permit, all applicable performance standards and requirements of the State Program.

Sec. 4 **PERMIT TERM** - This permit becomes effective on February 4, 1993, and expires on February 4, 1998.

Sec. 5 **ASSIGNMENT OF PERMIT RIGHTS** - The permit rights may not be transferred, assigned or sold without the prior written approval of the Division Director. Transfer, assignment or sale of permit rights must be done in accordance with applicable regulations, including but not limited to 30 CFR 740.13{e} and R645-303-300.

Sec. 6 **RIGHT OF ENTRY** - The permittee shall allow the authorized representative of the Division, including but not limited to inspectors, and representatives of the Office of Surface Mining Reclamation and Enforcement (OSM), without advance notice or a search warrant, upon presentation of appropriate credentials, and without delay to:

(a) have the rights of entry provided for in 30 CFR 840.12, R645-400-220, 30 CFR 842.13 and R645-400-110;

(b) be accompanied by private persons for the purpose of conducting an inspection in accordance with R645-400-100 and R645-400-200 when the inspection is in response to an alleged violation reported to the Division by the private person.

Sec. 7 SCOPE OF OPERATIONS - The permittee shall conduct surface coal mining activities only on those lands specifically designated as within the permit area on the maps submitted in the approved plan and approved for the term of the permit and which are subject to the performance bond.

Sec. 8 ENVIRONMENTAL IMPACTS - The permittee shall take all possible steps to minimize any adverse impact to the environment or public health and safety resulting from noncompliance with any term or condition of the permit, including, but not limited to:

(a) Any accelerated or additional monitoring necessary to determine the nature and extent of noncompliance and the results of the noncompliance;

(b) immediate implementation of measures necessary to comply; and

(c) warning, as soon as possible after learning of such noncompliance, any person whose health and safety is in imminent danger due to the noncompliance.

Sec. 9 CONDUCT OF OPERATIONS - The permittee shall conduct its operations:

(a) in accordance with the terms of the permit to prevent significant, imminent environmental harm to the health and safety of the public; and

(b) utilizing methods specified as conditions of the permit by the Division in approving alternative methods of compliance with the performance standards of the Act, the approved Utah State Program and the Federal Lands Program.

Sec. 10 EXISTING STRUCTURES - As applicable, the permittee will comply with R645-301 and R645-302 for compliance, modification, or abandonment of existing structures.

Sec. 11 RECLAMATION FEE PAYMENTS - The operator shall pay all reclamation fees required by 30 CFR Part 870 for coal produced under the permit, for sale, transfer or use.

Sec. 12 AUTHORIZED AGENT - The permittee shall provide the names, addresses and telephone numbers of persons responsible for operations under the permit to whom notices and orders are to be delivered.

Sec. 13 COMPLIANCE WITH OTHER LAWS - The permittee shall comply with the provisions of the Water Pollution Control Act (33 USC 1151 et seq,) and the Clean Air Act (42 USC 7401 et seq), UCA 26-11-1 et seq, and UCA 26-13-1 et seq.

Sec. 14 PERMIT RENEWAL - Upon expiration, this permit may be renewed for areas within the boundaries of the existing permit in accordance with the Act, the approved Utah State Program and the Federal Lands Program.

Sec. 15 CULTURAL RESOURCES - If during the course of mining operations, previously unidentified cultural resources are discovered, the permittee shall ensure that the site(s) is not disturbed and shall notify the Division. The Division, after coordination with OSM, shall inform the permittee of necessary actions required. The permittee shall implement the mitigation measures required by Division within the time frame specified by Division.

Sec. 16 APPEALS - The permittee shall have the right to appeal as provided for under R645-300-200.

Sec. 17 SPECIAL CONDITIONS - There are special conditions associated with this permitting action, as described in Attachment A, Permit Conditions.

The above conditions (Secs. 1-17) are also imposed upon the permittee's agents and employees. The failure or refusal of any of these persons to comply with these conditions shall be deemed a failure of the permittee to comply with the terms of this permit and the lease. The permittee shall require his agents, contractors and subcontractors involved in activities concerning this permit to include these conditions in the contracts between and among them. These conditions may be revised or amended, in writing, by the mutual consent of the Division and the permittee at any time to adjust to changed conditions or to correct an oversight. The Division may amend these conditions at any time without the consent of the permittee in order to make them consistent with any federal or state statutes and any regulations.

THE STATE OF UTAH

By: Lowell P Braxton
Acting Director Coal Division of Oil, Gas & Mi

Date: 2-4-93

I certify that I have read, understand and accept the requirements of this permit and any special conditions attached.

Pres. of Martha Corps

Authorized Representative of the Permittee

Date: 2/ /93

ATTACHMENT A

Permit Conditions

1. R645-301-117.300 (PGL) Within ten days, but no later than April 30, 1993, of signing the Operating Agreement between Sunnyside Cogeneration Associates (SCA) and Sunnyside Coal Company (SCC) for the operational and reclamation responsibilities for the two contiguous permit areas under the Utah Coal Program, the permittee must submit, for inclusion in the PAP, a copy of the Operating Agreement between SCA and SCC.

2. R645-301-233 (HS) By July 1, 1993 the permittee must adequately characterize the proposed borrow material (i.e., soil analyses and soil profile descriptions) down to the plan excavation depth to include the material which will remain and act as the plant growth medium for the reclamation of the borrow areas and submit for inclusion in the PAP. The suitability and availability of the proposed substitute topsoil material which covers the Coarse Refuse Pile and the embankments of the East and West Slurry Cells must be determined and submitted for inclusion in the PAP. In addition for inclusion in the PAP, the permittee must describe and provide for the protection of the cover material and discuss its temporary salvage and storage while mining activities proceed.

3. R645-301-321.100 (SW) By July 31, 1993 the permittee must submit, for inclusion in the PAP, a detailed discussion on the Riparian vegetation type. This discussion must include grasses, forbs, and shrubs found within this zone.

4. R645-301-321.200 (SW) By July 31, 1993 the permittee must submit, for inclusion in the PAP, a discussion of the productivity of the land in terms of average yield of forage.

5. R645-301-322.100 (SW) By September 30, 1993, the permittee must submit, for inclusion in the PAP, a report of the fish inventory in Icelander Creek and adjacent areas. The permittee must assist the DWR in an inventory of Icelander Creek for fish species to the Price River. Baseline transects must be established above and below the Price River, in Icelander Wash and at the discharge at the base of the refuse pile. Two Category 2 fish species, Roundtail chub and Flannelmouth sucker, are likely to be found at the Price River and Icelander Wash confluence. The Roundtail chub is likely to be listed to the Threatened and Endangered Species list. The DWR will provide a report of this inventory. A copy of the DWR report must be submitted within 10 days of receipt for inclusion in the PAP.

6. R645-301-330 (SW) Within 30 days of permit approval the permittee must provide a discussion, for inclusion in the PAP, as to tolerable limits of iron and TDS in water for plants, livestock, wildlife and fish and the impact of the mining operation on these limits due to the fact that the discharge at the base of the refuse pile has been identified to have exceeded standards for iron and TDS. (Note: The applicant's response to this initial deficiency was to reference to R645-301-728.317. This is not an acceptable response.)

7. R645-301-353.120 (SW) By July 31, 1993 the permittee must submit a re-evaluated seed mixture for inclusion in the PAP. The permittee must evaluate the seed mixture proposed for final reclamation planting after the reference areas have been sampled. The seed mixture must incorporate some of the components of the undisturbed adjacent area. This finalized seed mixture must then be submitted for inclusion in the PAP.

8. R645-301-356 (SW) By July 31, 1993 the permittee must submit, for inclusion in the PAP, the data, discussions, and results of the survey of the proposed reference areas.

9. R645-301-521 (JK & HS) By July 1, 1993 the permittee must submit, for inclusion in the PAP, accurate representations of the disturbed area within the permit area of the Sunnyside Cogeneration Associates facility. This must include, but not be limited to, current maps of the area which accurately depict the present configuration of the land within the permit area. All applicable maps must be updated to depict the current and accurate configurations. (Note: There are major discrepancies between the maps in the PAP and those found in the John T. Boyd report which comprises Appendix 9. Most of the maps in the PAP are based on outdated information from the Sunnyside Coal Company PAP and, therefore, do not accurately depict the present configuration of the site.)

10. R645-301-521.143 (JK) By July 1, 1993, the permittee must submit, for Division approval and inclusion in the PAP, an adequate and accurate plan for the disposal of noncombustible waste. (Note: According to the John T. Boyd report, included in Chapter 9, 'Mining Plan', noncombustible waste comprises about 5% of the total pile, or 460,000 tons of material. Using the density of 3375 pounds per cubic yard given on page 3-6, there may be about 273,000 cubic yards of noncombustible material. There is no demonstration in the PAP that this volume of material will even fit into the refuse disposal facility shown on Plate 9-1a. In fact, the volume of the facility shown on Plate 9-1a is only about 217,000 cubic yards, which includes the required 4 feet of cover material.)

11. R645-301-521.165 (JK) By July 1, 1993, the permittee must submit, for Division approval and inclusion in the PAP, plans for the stockpiling of reclamation borrow material. The permittee plans to dispose of noncombustible waste material in the same areas from which plans are borrow reclamation cover material (see Appendix 9-1, Exhibit 1, and Plate 8-1) but there is no provision in the PAP for stockpiling the reclamation borrow material prior to disposal of the noncombustible waste. These plans must include sound estimates of the volume of the borrow material as well as designs for the storage facility or facilities into which the material will be placed.

12. R645-301-528.100 (HS) By July 1, 1993, the permittee must clearly substantiate the handling and disposal of waste with designs and plans to determine the quantity of topsoil necessary to reclaim the site and submit for inclusion in the PAP. The permittee states in the PAP that approximately 460,000 cubic yards of borrow material will be necessary for the reclamation of the site subsequent to the removal of the combustible refuse material. However, the permittee's representation of the quantity and location of noncombustible material and inaccessible material (below elevation 6210 ft.) is not consistently represented in the PAP. Therefore, the handling and disposal of waste must be definitively stated and substantiated with designs and plans to enable the Division to verify and determine the quantity of topsoil necessary to reclaim the mine site.

13. R645-301-540 (JK) By July 1, 1993, the permittee must submit, for Division approval and inclusion in the PAP, a complete, stand-alone reclamation plan for worst case scenario (worst case would occur if the site were abandoned and had to be reclaimed in essentially its present configuration) **and** final reclamation (final reclamation of the site after the full anticipated life of the operation). The reclamation plan for each scenario must be comprehensive and independent of the other. Each reclamation plan must include its own text, maps, volume estimates (including but not limited to topsoil volumes, borrow material and sedimentation pond volumes), reclamation cost estimates, drainage control plan, etc. These plans must be based on the revised maps discussed in Condition R645-301-521 (JK & HS).

14. R645-301-542.800 (JK & HS) By July 1, 1993, the permittee must submit for Division approval and inclusion in the PAP: 1) accurate and adequate as-built surveys of the topsoil stockpiles which must provide sufficient information to determine the volume of topsoil within each topsoil stockpile; 2) adequate and accurate mass balance calculations to show where the required borrow material is to come from and to demonstrate that there is adequate borrow material to reclaim this site [these calculations must be based on separate surveys and/or on the revised maps discussed in condition R645-301-521 (JK & HS)]; and 3) adequate and accurate substantiation of the volumes of the sedimentation ponds.

15. R645-301-722, R645-301-732, and R645-301-742 (KW) By July 1, 1993, the permittee must submit sediment pond designs, for inclusion in the PAP, based on an on-site survey, which includes maps with adequate contours (1-2 foot contours), cross sections including the discharge structure designs with elevations and slopes of outlet pipes, and the slopes of diversions within the permit area.

16. R645-301-728 (KW) The permittee must submit, for inclusion in the PAP, a copy of the U.S. Fish and Wildlife Service study and/or report concerning water loss in the Colorado River Basin within 30 days following the issuance of the study and/or report.

17. R645-301-731.200 (KW) Within 30 days of permit approval, the permittee must submit, for inclusion in the PAP, a schedule for each of the water monitoring sites to be sampled with a list of the parameters to be analyzed at each site and the schedule for sampling as baseline and operational parameters.

18. R645-301-731.300 (HS) The permittee must commit, within 30 days of permit approval, to conduct additional analyses, for the purposes of determining the acid and/or toxic and alkalinity forming potential of the existing slurry ponds and the coarse refuse pile material. The commitment must include the analysis of **all** the constituents outlined in the Division's Guidelines for the Management of Topsoil and Overburden, Table 6. The permittee must also specify the sample site locations to be selected from the forty-five refuse drill holes (Note: Drilling, logging and sampling of refuse material did occur as early as 1991. Please refer to Appendix 9-1, page 3-3) and the depth increment to be analyzed (not "Half the **available samples...**" as state on page 600-10 of the PAP).

    In addition, by no later than July 1, 1993, the permittee must submit plans and laboratory results, for inclusion in the PAP, from the above sampling of the refuse and slurry material. Plans must include a discussion of the potential for, and mitigation of, water quality impacts and/or revegetation problems attendant to the reexcavation and disposal of the coal refuse material.

19. R645-301-731.730 (KW) By July 1, 1993, the permittee must submit, for inclusion in the PAP, accurate and adequate maps depicting locations and elevations of all water monitoring points within the permit area of the Sunnyside Cogeneration Associates facility.

20. R645-301-812.300 (PGL) By July 1, 1993, the permittee must submit, for inclusion in the PAP, the reclamation cost estimate based upon accurate and adequate information provided in all applicable conditions of this permit. A revised adequate reclamation bond must be provided to the Division within 30 days of Division approval of the revised reclamation cost estimate.

CUMULATIVE HYDROLOGIC IMPACT ASSESSMENT

Sunnyside Cogeneration Associates
Sunnyside Cogeneration Facility
ACT/007/035, Carbon County, Utah

February 1993

Prepared By:
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Salt Lake City, Utah

Figure 1: Book Cliffs Coal Field
(From Doelling 1972)

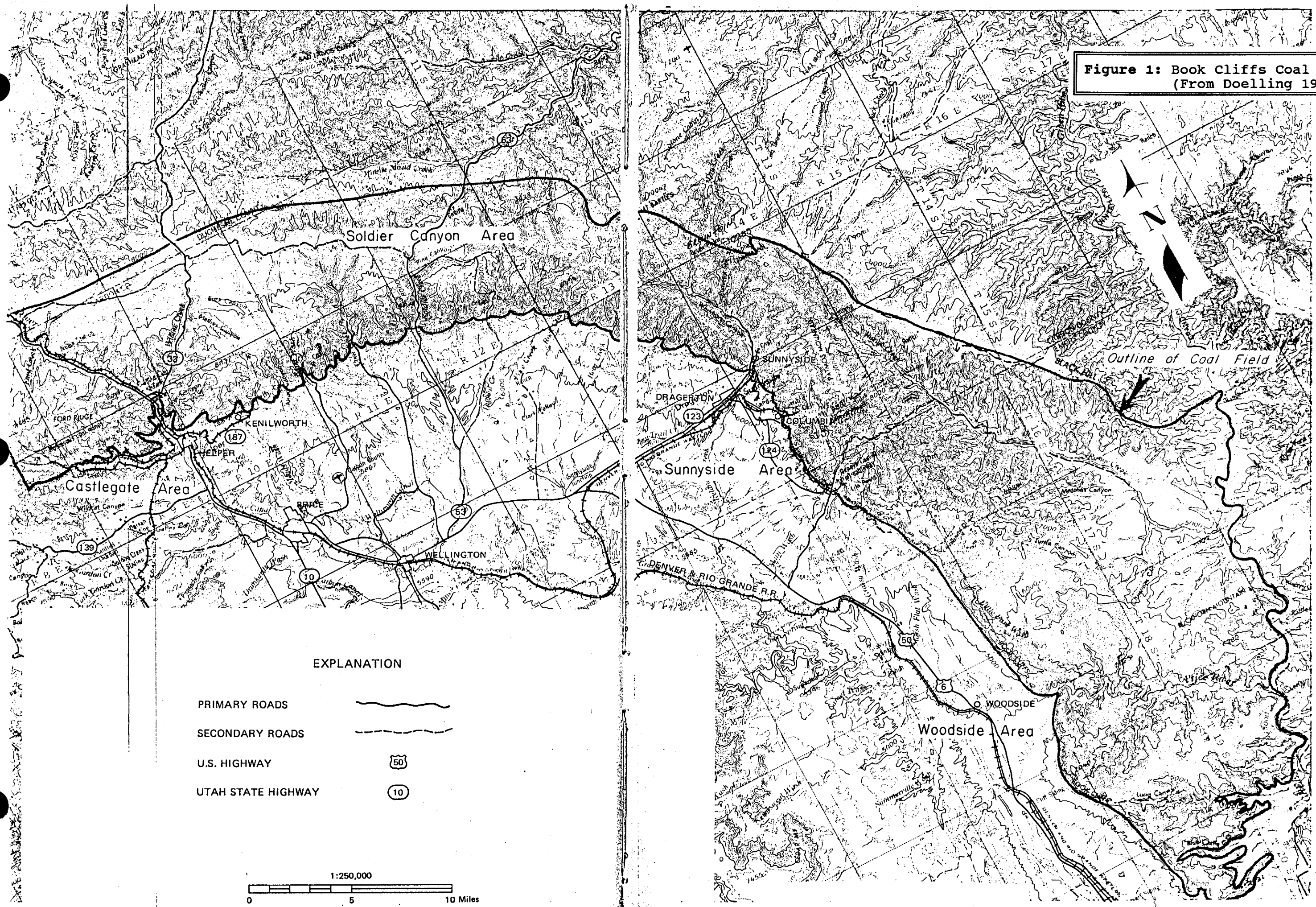
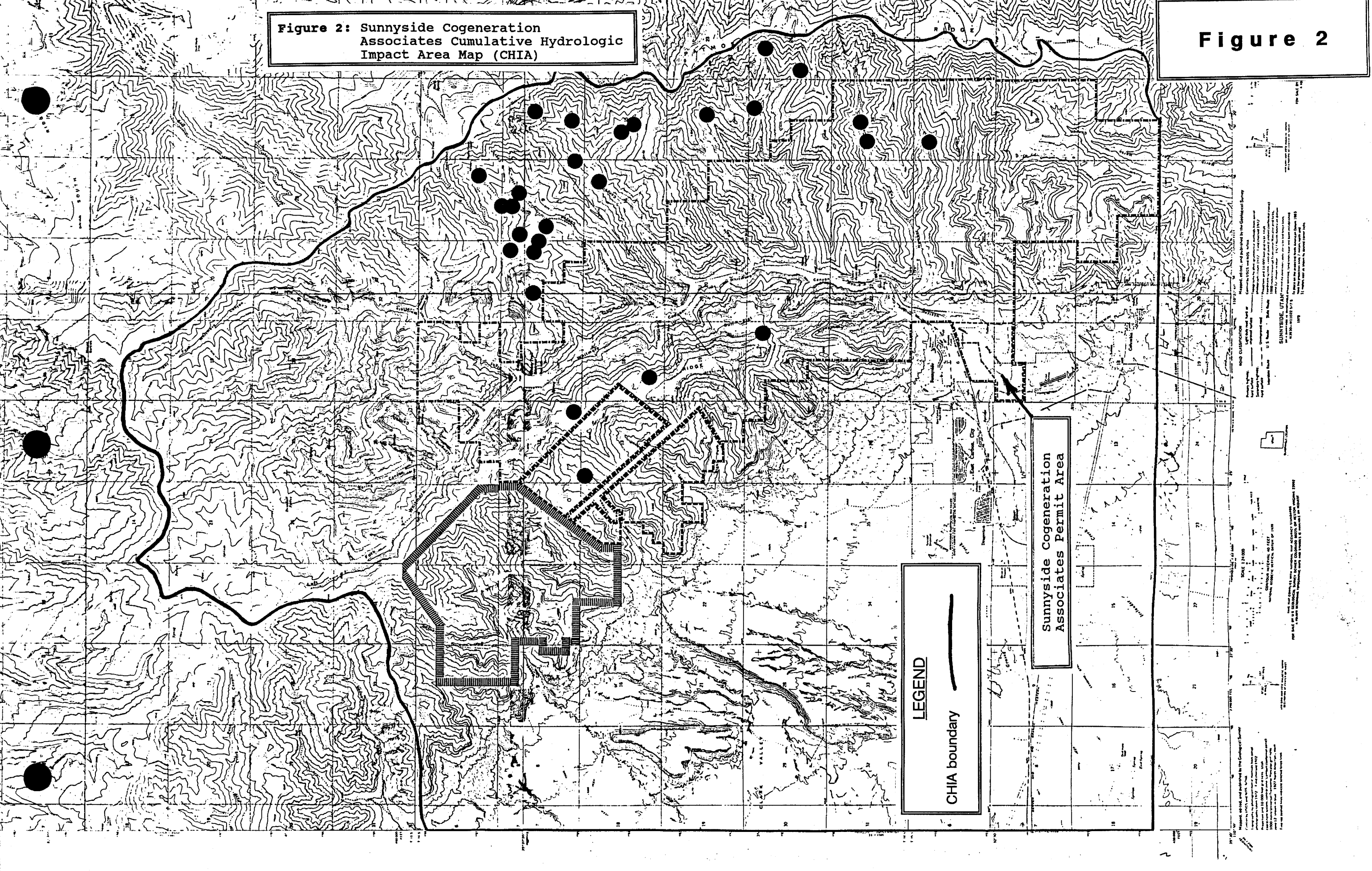


Figure 2: Sunnyside Cogeneration Associates Cumulative Hydrologic Impact Area Map (CHIA)

Figure 2



I. Introduction

This Cumulative Hydrologic Impact Analysis (CHIA) has been prepared for the Sunnyside Cogeneration Associates facility being permitted and constructed near Sunnyside, Utah. This document includes information which was previously prepared and used in the CHIA for the Sunnyside Mines which are located within this Cumulative Impact Area (CIA). This report references the Sunnyside Mine CIA and includes much of that information as prepared for the 1985 Sunnyside Mine permit. Additional information specific to the Sunnyside Cogeneration Facility has been prepared and included within this document. It is not the intent of this CHIA to re-address the Sunnyside Mine CHIA.

The purpose of this report is to provide a Cumulative Hydrologic Impact Assessment (CHIA) for the Sunnyside Cogeneration Associates facility (SCA) located in Carbon County, Utah. The CHIA encompasses the probable cumulative impacts of all anticipated coal mining in the general area on the hydrologic balance and whether the operations proposed under the SCA application have been designed to prevent damage to the hydrologic balance outside the proposed mine plan area. This report complies with federal legislation passed under the Surface Mining Control and Reclamation Act (SMCRA) and subsequent Utah and federal regulatory programs under UMC 786.19(c) and 30 CFR 784.14(f), respectively.

The SCA facility is located adjacent to the Book Cliffs Coal Field approximately 25 miles east of Price, Utah (Figure 1). The Book Cliffs form a rugged, southerly facing escarpment that delineates the Uinta Basin to the north from the San Rafael Swell to the south. Elevations along the Book Cliffs range from approximately 5,000 to 9,000 feet. The Sunnyside Cogeneration facility is located an elevation of approximately 6,500 feet.

Rocks of the Book Cliffs range from Upper Cretaceous to Quaternary in age. The rock record reflects an overall regressive sequence from marine (Mancos Shale) through littoral and lagoonal (Blackhawk Formation) to fluvial (Castlegate Sandstone, Price River Formation and North Horn Formation) and lacustrine (Flagstaff Formation and Green River Formation) depositional environments. Oscillating depositional environments within the overall regressive trend are represented by members of the Blackhawk Formation and the Colton Formation. The major coal-bearing unit within the Book Cliffs Coal Field is the Blackhawk Formation.

Annual precipitation varies from 20 inches at higher elevations to 5 inches at lower elevations. The Book Cliffs area may be classified as mid-latitude steppe to desert.

Vegetation varies from the sagebrush/grass community type at lower elevations to the Douglas fir/aspen community at higher elevations. Other vegetative communities include mountain brush, pinyon-juniper, pinyon-juniper/sagebrush and riparian. These communities are primarily used for wildlife habitat and livestock grazing.

Surface runoff from the Book Cliffs area flows into the Price River drainage basin of east-central Utah. The Price River originates near Scofield Reservoir and flows southeasterly into the Green River, north of Green River, Utah. Water quality is good in the mountainous headwater tributaries, but deteriorates rapidly as flow traverses the Mancos Shale. The shale lithology typically has low permeability, is easily eroded and contains large quantities of soluble salts that are a major contributor to poor water quality. Depending upon the duration of contact, water quality degrades downstream where total dissolved solids (TDS) levels of 3,000 milligrams per liter (mg/l) are not uncommon.

II. Cumulative Impact Area (CIA)

Figure 2 delineates the CIA for current and projected Sunnyside Mine operations, the SCA facility, and any reclaimed or proposed mining operations. The CIA is defined by surface drainages and the ground-water basin which corresponds to the surface topography. The CIA includes the Whitmore Canyon drainage basin, intermittent drainages south of the divide separating Rock Canyon and Bear Canyon and the upper drainage basin of the North Fork of Horse Canyon. The western boundary is designated by 110° 30′ W longitude, whereas the southern boundary is limited by the Sunnyside Cogeneration's property line and its westward extension to 110° 30′ W longitude. The CIA encompasses approximately 64,000 acres. Other potential mining external to the CIA include the proposed Sage Point-Dugout Canyon Mine to the west and the reclaimed Horse Canyon Mine located to the east. Impacts associated with mining external to the CIA occur in separate surface and subsurface drainage basins and, therefore, do not apply to this assessment.

III. Scope of Mining

A. Sunnyside Mines

Mining at Sunnyside, Utah began during the late 1890's. Total coal production has exceeded 55 million tons. Kaiser Steel Corporation acquired the Sunnyside properties in 1950 and operated the mines until April 1985. Since that time, the mine has been operated by Kaiser Coal Corporation and more recently by Sunnyside Coal Company.

Sunnyside Coal Company's Sunnyside operations include, from south to the north, the No. 2 Mine, No. 3 Mine and No. 1 Mine. The three mines are adjacent to each other and workings currently encompass the southern three-quarters of the permit area. Future mining is projected to occur towards the northwest and will include separate permits for the B Canyon and C Canyon areas.

Mine workings are approximately 6.5 miles in length and extend a maximum of 2.5 miles down-dip to the east. The first five year permit area encompasses 14,300 acres. Mining, during the first five year permit term, will occur in the Upper Sunnyside coal seam in the No. 3 Mine and Lower Sunnyside coal seam in the No. 1 Mine and No. 2 Mine. Sixty-five to eighty percent of the coal will be produced by longwall mining methods. The remaining production will be from continuous miner entry development and pillaring in areas unsuitable for longwall methods.

B. **Sunnyside Cogeneration Facility**

Sunnyside Coal Company's coarse refuse disposal area and slurry impoundments were acquired in 1988 by Sunnyside Cogeneration Associates (Environmental Power Corporation) to serve as a long term supply of fuel (coal mine waste-coarse refuse and slurry) to a cogeneration energy facility which was constructed adjacent to the refuse disposal area. Although the coarse refuse disposal area and slurry impoundments were acquired (property owners) SCA's alternative energy project was approved by the Federal Energy Regulatory Commission as a "Qualifying Facility" based on the use of coal mine waste as fuel in it's fluidize-bed combustion reactor.

SCA will utilize both active waste from the Sunnyside Coal Company processing plant and accumulated waste from the slurry impoundments and coarse refuse pile as fuel for it's facility. SCA's fueling plan will require excavating the slurry fines and the coarse refuse, blending and then burning this material in the power plant. Initial startup is scheduled for February 1993 and is proposed to continue for twenty years.

Production will consist of blending coarse material and fine material from abandoned and active slurry cells. Production in tons for the first five year permit term is projected listed below.

YEAR	FINE MATERIAL	COARSE MATERIAL	TOTAL FUEL
1993	106,692	303,308	410,000
1994	110,812	299,188	410,000
1995	76,347	333,653	410,000
1996	69,255	340,745	410,000
1997	95,106	314,894	410,000
TOTALS	458,212	1,591,788	2,050,000

IV. Study Area

A. Geology

The CIA is characterized by cliffs, narrow canyons, and pediments. Stratigraphic units outcropping within the area include from oldest to youngest, the Mancos Shale, Blackhawk Formation, Castlegate Sandstone, Price River Formation, undifferentiated North Horn/Flagstaff Formation, Colton Formation, Green River Formation and Quaternary deposits. Lithologic descriptions and unit thicknesses are given in Figure 3 below.

SYSTEM	SERIES	STRATIGRAPHIC UNIT	THICKNESS (Feet)	DESCRIPTION
QUATERNARY	Holocene Pleistocene	QUATERNARY DEPOSITS	Variable	Surficial stream terrace and channel, alluvial fan, landslide, talus and moraine deposits
TERTIARY	Eocene	GREEN RIVER FORMATION	100	Greenish-gray and white claystone and shale, also contains fine grained and thin bedded sandstone. Shales often dark brown containing carbonaceous matter. Full thickness not exposed.
		COLTON FORMATION	250 - 1,000	Brown to red lenticular sandstone, shale,and siltstone
		UNDIFFERENTIATED NORTH HORN/FLAGSTAFF FORMATION	1,200 - 1,800	Flagstaff consists of blue-gray to reddish brown limestone. North Horn predominantly gray to gray-green calcareous and silty shale, tan to yellow-gray fine-grained sandstone and minor conglomerate.
	Paleocene			
UPPER CRETACEOUS	Maestrichtian			
	Companian	PRICE RIVER FORMATION Bluecastle Sandstone Member Lower Unnamed Member	500	Yellow-gray to white, medium-grained sandstone and shaley sandstone with gray to olive-green shale. Contains carbonaceous shale with minor coal.
		CASTLEGATE SANDSTONE	180	White to gray, fine- to medium-grained argillaceous massive resistant sandstone with subordinate shale.
		BLACKHAWK FORMATION Upper Mudstone Member Sunnyside Member Lower Mudstone Member Kenilworth Member Aberdeen Member	700	Cyclical littoral and lagonal deposits. Littoral deposits mainly thick-bedded to massive cliff forming yellow-gray fine- to medium-grained sandstone, individual beds separated by gray shale. Lagonal facies consist of thin- to thick-bedded yellow-gray sandstones, shaley sandstones, shale and coal. Coal beds form basis of Book Cliffs Coal Field.
	Santonian	MANCOS SHALE	4,000	Gray marine shale, locally heavily charged with carbonaceous material, slightly calcareous and gypsiferous, nonresistant forming flat desert surface and rounded hills and badlands.
	Coniacian			

Figure 3: Stratigraphy of the Sunnyside, Utah Area (Modified from Doelling 1972 and Osterwald 1981).

Stratigraphic units in the CIA generally strike northwest and dip to the northeast at angeles of 5 to 12 degrees. The predominant fault trend is northwest-southwest, roughly paralleling strike. Fault displacement is generally less than 100 feet.

Principal coal accumulations occur within the Blackhawk Formation. Five coal seams have been identified and are termed, in ascending order: the Kenilworth, Gilson, Rock Canyon, Lower Sunnyside and Upper Sunnyside beds. The Lower and Upper Sunnyside beds have the greatest economic potential and are the focus of current and future Sunnyside Coal Company extraction operations.

B. **Topography and Precipitation**

Topography ranges from less than 5,800 feet to over 10,000 feet in the western and eastern portions of the CIA, respectively.

The western portion of the CIA, from 110° 30′ W longitude to the crest of the West Ridge and south of the drainage divide between Grassy Trail Creek and Icelander Creek above Horse Canyon is characterized by southeast draining ephemeral streams that originate above 8,500 feet and progressively traverse nonmarine and marine Cretaceous rocks and alluvial fan deposits. Precipitation in the western portion of the CIA varies from 20 to less than 8 inches. However, a realistic approximation for average annual precipitation is 10 inches per year. Slopes associated with alluvial fans are approximately three to four percent, whereas slopes along the Book Cliff's escarpment between 7,000 and 8,800 feet average 22 percent.

The eastern portion of the CIA is characterized by a north-south perennial stream system with northeast-southwest trending tributaries. Headwaters originate above 10,000 feet and progressively traverse Tertiary and Cretaceous age rocks. Precipitation is less variable than in the western portion of the CIA and the average annual value is 20 inches or more. Slopes associated with the north-south system of perennial steams are approximately three to four percent below 7,500 feet. Slopes for northeast-southwest trending tributaries are approximately 32 percent above 7,500 feet.

There is a strong north-south slope effect on vegetation because of the narrow canyons. North facing slopes are dominated by Douglas Fir or mountainbrush communities with south-facing slopes are typically dominated by pinyon-juniper and sagebrush.

These vegetation types are intermixed with grassland vegetation at lower elevations.

Riparian vegetation is located in the moist areas of the narrow canyon floors and along Grassy Trail Creek. This vegetation type is dominated by willows and sagebrush with an overstory of narrowleaf cottonwood and box elder.

V. Hydrologic Resources

A. Ground Water

The ground-water regime within the CIA is dependent upon climatic and geologic parameters that establish systems of recharge, movement and discharge.

Snowmelt at higher elevations provides most of the ground-water recharge, particularly where permeable lithologies such as fractured or solution limestone are exposed at the surface. Vertical migration of ground-water occurs through permeable rock units and/or along zones of faulting and fracturing. Lateral migration initiates when ground-water encounters impermeable rock layers and continues until either the land surface is intersected (and spring discharge occurs) or other permeable lithologies or zones are encountered that allow further vertical flow.

The Kenilworth Member, Sunnyside Member and Upper Mudstone Member of the Blackhawk Formation, Castlegate Sandstone, Bluecastle Sandstone Member of the Price River Formation, undifferentiated North Horn/Flagstaff Formation, Colton Formation, Green River Formation, and Quaternary deposits are potential reservoirs or conduits for ground-water in the CIA. Reservoir lithologies are predominantly sandstone and limestone.

Sandstone reservoirs occur as channel and overbank, lenticular and tabular deposits, whereas limestone reservoirs have developed through solution processes and fracturing. Shale, siltstone and cemented sandstone beds act as aquacludes to impede ground-water movement. The Mancos Shale is a regional aquaclude that limit downward flow within the CIA. Localized aquacludes include the Aberdeen Member and Lower Mudstone Member of the Blackhawk Formation, Lower Unnamed Member of the Price River Formation and relatively thin impermeable lithologies occurring within overlying units.

Thirty-six springs or area of multiple springs occur within the CIA (Figure 4). Three springs are located within Sunnyside Mines permit area. The majority of springs occur above 8,000 feet and discharge from the Green River Formation. Two springs

Figure 4: Location of Springs and Mine Shafts with Significant Inflows within the CHIA

Figure 4

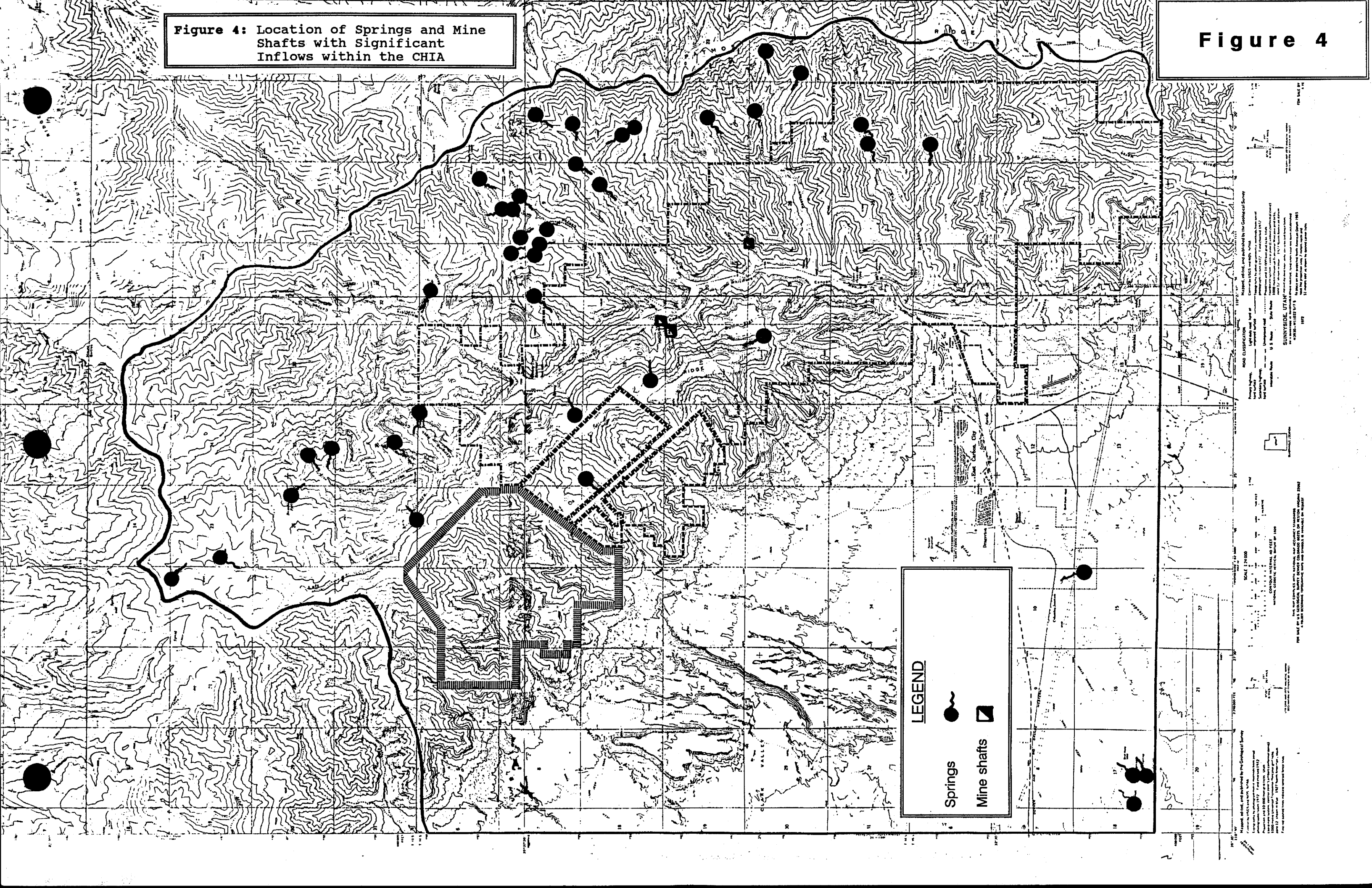


Figure 5: Surface Water Drainages Within the CHIA

Right and Left Fork
Grassy Trail Creek Drainage

Grassy Trail Reservoir

Whitmore Canyon/
Grassy Trail Creek Drainage

Price River - Lower Basin
Grassy Trail Creek Drainage

Icelander Creek Drainage

Price River - Lower Basin
Horse Canyon Drainage

LEGEND

Watershed boundary

Figure 5

Figure 6: Areas of Relatively Greater Recharge within the CHIA

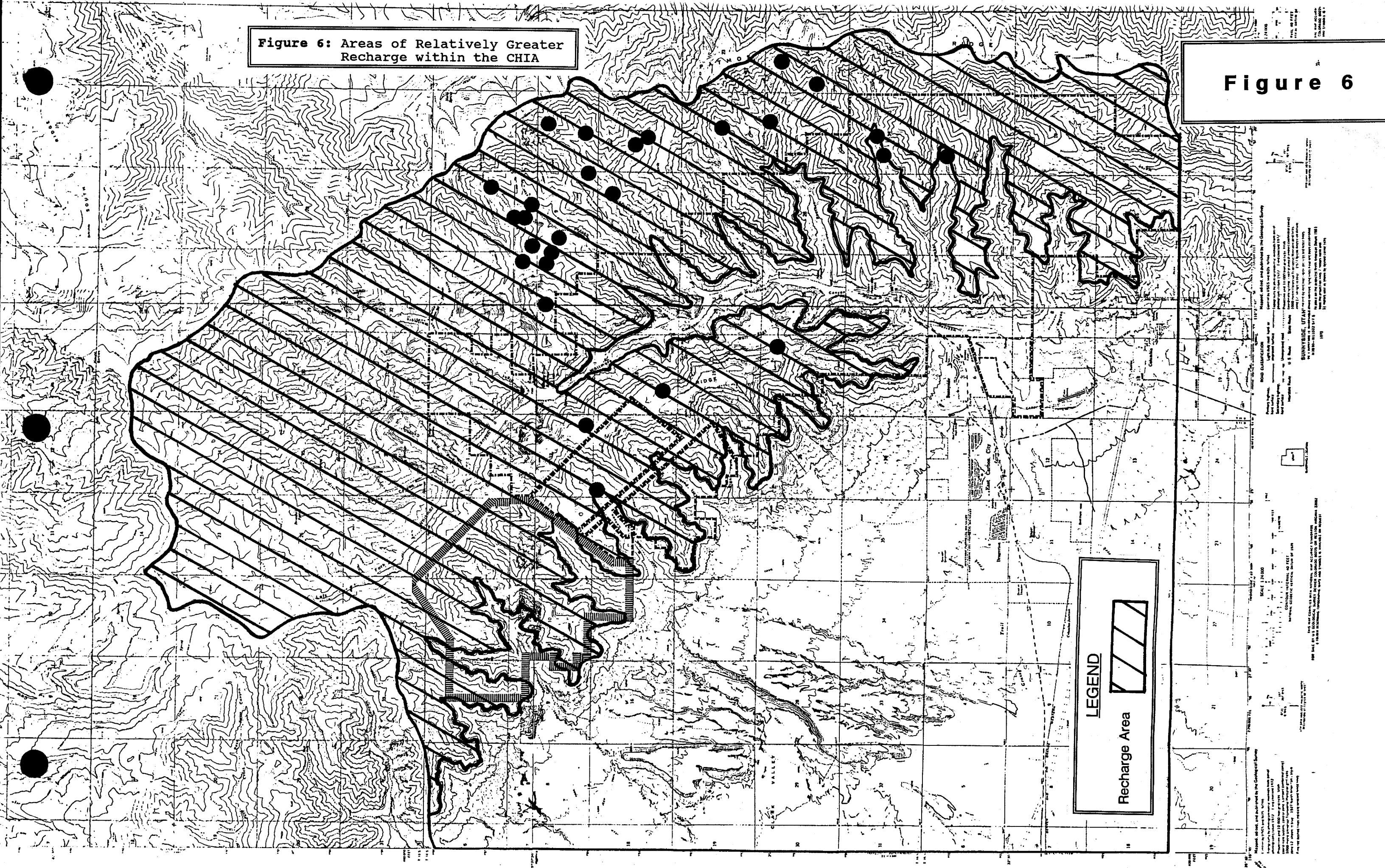


Figure 6

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occur in the southwest portion of the CIA and are associated with Quaternary alluvium overlying the Mancos Shale. These are within or adjacent to SCA's permit area. (Figure 5) Average flow is estimated to be less than 10 gpm for each spring.

Total mine inflow at the Sunnyside Mines is approximately 740 gpm from mine shafts (245 gpm), boreholes (300 gpm), paleochannels (10 gpm) and gobs, faults and fractures (185 gpm). The majority of inflow occurs in the No. 1 Mine and is associatedwith the Manshaft, Twin Shafts, Pole Canyon Shaft and 18th Left Outside Panel (Figure 4). The Manshaft and Twin Shafts penetrate from the Blackhawk Formation to undifferentiated North Horn/Flagstaff Formation and extend through the Castlegate Sandstone and Price River Formation. Flow into the Manshaft and Twin Shafts totals 160 gpm and is, most likely, derived from either the Bluecastle Sandstone Member and/or permeable lithologies in the undifferentiated North Horn/Flagstaff Formation. The Pole Canyon Shaft penetrates the Blackhawk Formation, Castlegate Sandstone, Price River Formation and Colton Formation. Pole Canyon Shaft inflow exceeds 50 gpm and is probably derived from the Colton Formation. The 18th Left Outside Panel collects flow from previously mined areas up dip. This flow may be attributed to wall weeps, roof drips and fractures and presumably represents aquifer dewatering within and adjacent to the coal seam (i.e., Kenilworth Member, Sunnyside Member, Upper Mudstone Member).

B. **Surface Water**

Four principal drainages occur within the CIA. These drainages are termed Grassy Trail Creek, Price River-Lower Basin Grassy Trail Creek, Icelander Creek and Price River-Lower Basin Horse Canyon (Figure 5). Grassy Trail Creek drainage has been further subdivided into Right and Left Fork Grassy Trail Creek and Whitmore Canyon/Grassy Trail Creek.

1. Right and Left Fork Grassy Trail Creek

Right and Left Fork Grassy Trail Creek are characterized by steep gradients, narrow canyons and gravel streambeds with silt and sand where gradients are reduced. Base flow is sustained by springs at approximately 8,500 feet.

Mining will be confined to areas beneath and adjacent to West Ridge. A subsidence barrier has been established to protect Grassy Trail Reservoirs and Right and Left Fork Grassy Trail Creek. Excepting the reservoirs, surface disturbance is limited to preexisting Class III access roads located along the Right Fork and Left Fork of Whitmore Canyon.

2. Whitmore Canyon

Grassy Trail Creek, from the permit boundary to the reservoir, is characterized by a low gradient (three to four percent), a relatively broad canyon (30 to 100 yards wide) and a bedrock streambed that is sporadically overlain by boulders, gravel, sand and mud. Grassy Trail Reservoir impounds upper Grassy Trail Creek flow and thus, has reduced the flooding potential associated with thunderstorm events. Flow records since 1979 for the Grassy Trail Creek below the reservoir have ranged from 10 cfs to 100 cfs.

Slaughter Canyon, Number Two Canyon, Pasture Canyon, Pole Canyon, Bear Canyon, and Water Canyon are tributaries to Grassy Trail Creek. These secondary drainages are characterized by steep gradients (greater than 25 percent), narrow canyons and gravel streambeds with sand and silt where gradients are reduced. Tributary flow is intermittent and in response to precipitation events.

Mining has occurred beneath most of Grassy Trail Creek and portions of the six tributaries. During the first five year permit term mining will extend northeast to encompass additional areas beneath Grassy Trail Creek, Number Two Canyon (Left Fork), Bear Canyon, and Water Canyon. Future mine development will continue to the north and northeast and progressively encompass additional areas beneath Grassy Trail Creek and the five tributaries entering from the east.

Most of the mining related surface disturbance is located along Grassy Trail Creek and includes the office and shop complex, loadout and preparation plant facilities, shafts, power substations and a variety of access and haul roads.

3. Price River-Lower Basin Grassy Trail Creek

The area west of West Ridge is characterized by low gradient (3 to 4 percent), ephemeral drainages with headwaters in short, steep gradient (greater than 20 percent) canyons.

Mining has occurred beneath West Ridge from Slaughter Canyon to Right Fork A Canyon and will encompass additional areas beneath West Ridge as mining extends towards the north into the B Canyon and C Canyon permit areas.

Surface disturbance is limited to ventilation portals in Fan Canyon and B Canyon and Class III access roads. Future disturbance will include a two tiered pad for coal loadout in C Canyon and a Class I haul road from C Canyon to State Highway 123. The haul road and highway will intersect approximately four miles west of East Carbon City.

4. Icelander Creek

Icelander Creek originates in Water Canyon and Fan Canyon south of the mine complex and is characterized by low (3 to 4 percent) to moderate (10 percent) gradients that traverse alluvial fan deposits and outcropping Mancos Shale. Springs associated with alluvial fan deposits and the seep[from the Coarse Refuse Area contribute flow to Icelander Creek. Approximately four miles below the Coarse Refuse Area, stream flow infiltrates into underlying sediments and Icelander Creek becomes dry.

Mining has occurred beneath Water Canyon and Fan Canyon and will occur beneath the upper portion of Water Canyon. Surface disturbance is confined to the Coarse Refuse Area, ventilation portals in Water Canyon and Fan Canyon and Class III access roads.

As the Coarse Refuse pile and the slurry pond fines are consumed, the Sunnyside Cogeneration project will over time diminish the flow at the base of the coarse refuse pile. As the cogeneration plant excavates and removes the coarse refuse material, the source of the seep will be uncovered and the source of the seep will be eliminated as the east and west slurry ponds are removed. This flow should cease during the life of the project if the project proceeds as planned.

5. Price River-Lower Basin Horse Canyon

A limited portion of the Horse Canyon drainage occurs within the CIA (Figure 5 above). The area is characterized by relatively steep gradients and intermittent flow.

Mining has occurred beneath most of the area and will occur in a small portion of the No. 2 Mine (12th Right Panel) during the first five year permit term. Surface disturbance related to mining in this CIA has not occurred and will not occur in the Horse Canyon drainage area.

C. **Alluvial Valley Floors**

Grassy Trail Creek, from the mouth of Straight Canyon to 110° W longitude, has been determined to be an Alluvial Valley Floor (AVF). The positive determination was based on the presence of unconsolidated streamlaid deposits holding streams and sufficient water to support agricultural activities as evidenced by the existence of flood (and sprinkler) irrigation or its historical use. Approximately 1,100 acres either are or have been irrigated.

The designated AVF is adjacent to the permit area and located within the dissected portions of alluvial fan deposits that characterize the eastern portion of the CIA.

The majority of Sunnyside Mine discharge (740 gpm) is directed to Grassy Trail Creek and irrigation systems located along the creek. Over half of the acreage reported in alfalfa is irrigated with mine water.

VI. Potential Hydrologic Impacts

A. Ground Water

Dewatering and subsidence related to mining have the greatest potential for impacting ground-water resources in the CIA. The SCA project should have minimal to no impact on the groundwater resources.

1. Sunnyside Coal Company

a. Dewatering

The volume of water being discharged from the No. 3 Mine and No. 1 Mine (740 gpm) approximates the amount of water that is currently being withdrawn from the ground-water system. The withdrawal value may be compared to an estimated value for recharge within the CIA and thereby, allow an assessment of dewatering impacts.

Approximately 33,000 acres of the total area within the CIA are above 7,500 feet where average annual precipitation is approximately 20 inches (Figure 6). Topography above 7,500 feet is less steep than the canyon areas below and outcropping rocks include the relatively permeable lithologies within the undifferentiated North Horn/Flagstaff Formation, Colton Formation, Green River Formation, and Quaternary deposits.

Recharge has been estimated to be 3 to 8 percent (Danielson and Sylla, 1983), 9 percent (Waddell et al, 1983) and 12 percent (Simons, Li & Associates, 1984) of the average annual precipitation for areas in the Wasatch Plateau and Book Cliffs coal fields. The recharge rate for areas above 7,500 feet may be derived as shown below:

$$\frac{(\%\ \text{recharge}) \times (\text{average annual precipitation}) \times (\text{area})}{\text{time}} = \text{Recharge Rate}$$

Calculations using estimated recharge values of 4, 8 and 12 percent of the average annual precipitation above 7,500 feet give recharge rates of 1,360 gpm, 2,720 gpm and 4,080 gpm,

respectively. A comparison of the rate of current mine discharge (740 gpm) to the range of calculated rates of recharge (1,360-4,080 gpm) indicates approximately 20 to 50 percent of the recharge is currently being intercepted by mine operations. If the rate of mine discharge is less than the rate of recharge, then the water being accessed by mine operations constitutes flow through the system rather than depletion of ground-water storage within the system. Hence, the current dewatering associated with Sunnyside operations is considered to not significantly impact piezometric surfaces within the CIA.

Mining during the first five-year permit term will encompass approximately 385 acres. It is not anticipated that the rate of discharge will exceed the recharge rate during this permit term. However, as mine operations expand in the future to encompass the proposed B Canyon (1,910 acres) and C Canyon (2,650 acres) permit areas and additional areas in the No. 1 Mine, No. 2 Mine and No. 3 Mine (1,450 acres), an increase in discharge is anticipated. At present, data is not available to precisely document increases in mine discharge. An estimate of discharge increase may be derived by multiplying the discharge per acre of present mine workings times the projected area of mine workings as shown below:

$$\frac{\text{present discharge rate}}{\text{present area of workings}} \times \text{projected area of workings} = \text{estimated discharge increase}$$

The above calculation indicates discharge will approach the value for recharge as the mine workings encompass an additional 4,000 acres in approximately 20-30 years. As discharge increases and surpasses values for recharge, certain spring flow and base flow recharge to streams may gradually decrease until ground-water storage begins to be depleted. Conceivably, depletion may continue (at increasing rates) until spring flow and/or base flow recharge to streams ceases. Figure 7 depicts potential long-term mining impacts to the ground-water regime.

Upon termination of mining operations, ground-water discharge to Grassy Trail Creek will be discontinued and the mine will begin to flood. The potential reduction in surface flow that is associated with the cessation of operations may be evaluated in terms of the lag time required for reestablishment of base flow recharge.

The impact associated with the reduction in surface flow is considered temporary. Mine flooding will conceivably reestablish a system of base flow recharge that was operational prior to mining. The time span required for reestablishing base flow

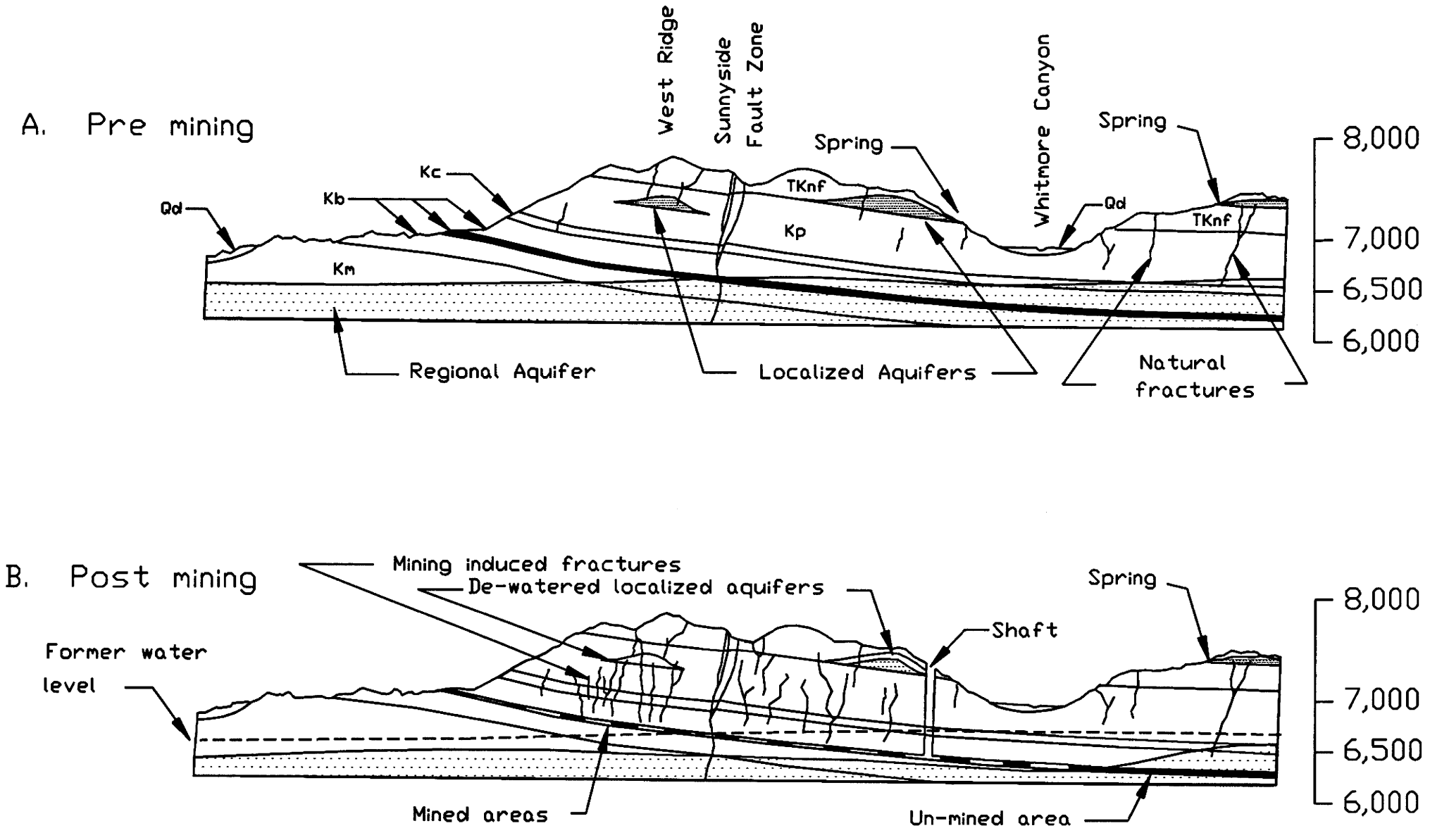

Figure 7: Long Term Impacts to Groundwater Regime

recharge may be estimated by dividing the final mine workings volume by the final estimated values for mine discharge.

$$\frac{\text{final volume of mine workings}}{\text{final rate of mine discharge}} = \text{flooding time}$$

The maximum lag time for mine flooding may be derived by assuming the workings will remain open (average five foot height) and caving will not occur. Accordingly, for the Sunnyside Mines, the computation provides an upper limit of 26 years for complete mine flooding. It should be noted that complete flooding will, undoubtedly, never be achieved because the hydraulic head generated as flooding expands will also increase until the hydraulic properties of the roof, floor and rib are exceeded and flow through the rocks is initiated.

The proposed ground-water monitoring program for the Sunnyside Mines will, in the future, allow increasing discharge rates to be more precisely characterized and thereby, achieve a more accurate assessment of mining related dewatering impacts.

b. Subsidence

Subsidence impacts are largely related to extension and expansion of the existing fracture system and upward propagation of new fractures. Inasmuch as vertical and lateral migration of water appears to be partially controlled by fracture conduits, readjustment or realignment in the conduit system will inevitably produce changes in the configuration of ground-water flow. Potential changes include increased flow rates along fractures that have "opened" and diverting flow along new fractures or within permeable lithologies. Subsurface flow diversion may cause the depletion of water in certain localized aquifers and potential loss of flow to springs that will be undermined (three total). Increased flow rates along fractures would reduce ground-water residence time and potentially improve water quality.

A maximum value of 1.5 feet of surface subsidence has been recorded over the 18th Left Inside Panel, No. 1 Mine (6,000 feet x 600 feet) beneath approximately 1,000 feet of overburden. The presence of the Castlegate Sandstone in conjunction with overburden thickness (approximately 1,000 feet) is apparently responsible for reduced surface subsidence. Additional mining during the five-year permit term will occur beneath 1,500-2,000 feet of overburden. Consequently, the potential for subsidence related surface impacts (e.g., ponding) to the subsurface and surface hydrologic regimes are not considered significant.

2. **Sunnyside Cogeneration Associates**

The Sunnyside Cogeneration Associates' project is situated in an area where the refuse from the Sunnyside Mines has been disposed of for years. The refuse material has been placed in a natural drainage similar to a head of hollow fill. The seep at the toe of the refuse pile is believed to be caused from water infiltrating down through the slurry cells. This water then flows along the contour of the natural drainage channel emerging at the toe of the refuse pile. Samples of this seep have indicated that acidic conditions do exist within the refuse pile. Additionally, the temperature of the seep indicates that this water is being heated by the buried coal fires located within the refuse pile. Certain metals (i.e. inert manganese) are elevated well above the average concentrations of that found in adjacent natural springs. This may indicate oxidation of pyrite within the refuse, a subsequent decrease in pH and the dissolution and transport of metals.

The applicant has committed to sampling this seep at the source and analyzing for the baseline parameters found in the Division's Guidelines for Establishment of Surface and Groundwater Monitoring Programs for Coal Mining and Reclamation Operations. This monitoring will provide additional data as to the toxicity of this seep. Throughout the life of this operation the excavation and removal of coarse refuse material and the fines from the slurry cells will slowly diminish and remove the source of this seep.

B. **Surface Water**

1. **Sunnyside Coal Company**

a. Grassy Trail Creek

The concentration of total dissolved solids (TDS) increase from 250-451 mg/l above to 1,250-2,000 mg/l below the Sunnyside Mines (Waddell, 1981). The TDS value for mine water discharge is 1,600 mg/l. Moreover, above the mines, calcium, magnesium and bicarbonate are the predominant ions and below the mines sodium, bicarbonate and sulfate are dominant (Waddell, 1981). These increases are attributed to the addition of mine water discharge which is similar to ground-water that has been mineralized through contact with the Mancos Shale.

The mine water from the Sunnyside Mines supplies 1,473 tons of dissolved solids per year to Grassy Trail Creek based on an average mine water discharge for the years 1978-1984. The Price River at Woodside carries 291,620 tons of dissolved solids per year based on an average discharge per year (USGS Water Data Reports 1979-83). It is important to mention that the water in Grassy Trail Creek is used for irrigation and based on this assumption, the salt entering the Price River from mine water is

less than the 1,473 tons given above due to loss of water for irrigation in the Sunnyside area. Infiltration and evaporation from irrigation also influences the amount of water and ultimately salt content eventually discharging to the Price River.

The average concentration of TDS in mg/l for mine water from the Sunnyside Mines is 1,600 (Sunnyside MRP). The water in Grassy Trail above the mine averages approximately 300-500 mg/l TDS. The average concentration of TDS for Grassy Trail Creek for the combination of mine water and creek water from above the mine varies from 300 mg/l to 1,800 mg/l depending on the flow and season (personal communication, Doug Pearce, Sunnyside Mine). The Utah Department of Health's standard for TDS for the Sunnyside Mines is 2,200 mg/l for industrial uses and 1,200 mg/l for agricultural uses. The mine water meets the industrial (Class 5) numerical standard for protection of the beneficial uses of water, but on occasion will exceed the agricultural standard.

It should be pointed out that without mine water, none or little irrigation water would be available to the downstream users. Even though the creek water is marginal quality for irrigation, the quantity makes irrigation feasible in the Sunnyside area. As well as providing irrigation water, Grassy Trail Creek supplemented by mine water supports a put-and-take fishery (Section 10.3.2.1, page 5, MRP).

Wingate (1981) identified the following impacts to Grassy Trail Creek. "(1) Grassy Trail Reservoirs has altered the stream's natural flow regime, (2) mine discharge waters have resulted in considerable changes in water quality of the lower stream section and (3) use of coarse refuse coal mine waste materials as road bed fill appears to contribute to aquatic resource deterioration."

Mine waste is presently directed to sediment ponds and then released to Grassy Trail Creek at NPDES discharge points #001 and #002. The treatment associated with these ponds improves suspended solids and oil and grease parameter values, but overall total dissolved solids (TDS) values remain in the range of 1,600 mg/l below the #002 discharge point. The #001 mine water pond was installed during the 1985 and the #002 mine water pond was installed during 1981. Future impacts from surface facilities and mine water discharge are not anticipated to increase from present levels. The quantity of mine water may increase, causing increased TDS levels downstream and suspended solid values will decrease as sediment controls are implemented in problem areas.

b. Price River-Lower Basin Grassy Trail Creek

Surface disturbance west of West Ridge will be confined to future C Canyon development. Sediment control measures for both the loadout facility and haul road will be implemented in association with the permit approval process to minimize hydrologic impacts.

2. **Sunnyside Cogeneration Associates**

a. Icelander Drainage

The coarse refuse disposal area, the #004 discharge point (includes discharge from the Clear Water Pond), Water Canyon and Fan Canyon all drain to the Icelander Creek.

Impacts in terms of surface water degradation have occurred at the #004 NPDES discharge point and Coarse Refuse Seep. The #004 discharge data indicate total suspended solids (TSS) values in the range of 1,400 ppm and oil and grease values in the range of less than 1 to 45 mg/l. The values for oil and grease since October of 1992 have been within acceptable limits, therefore, future impacts related to oil and grease contaminants are not anticipated.

Icelander Drainage is also affected by water from the Coarse Refuse Seep. The fires within the refuse pile and pyrite oxidation (exothermic reaction) cause a temperature of 28°C and a TDS value of approximately 5,000 mg/l at the Coarse Refuse Seep. Total iron has been recorded as high as 55.0 mg/l at the source.

Sunnyside Coal Company previously treated the seep with flocculants and has proposed to mitigate future impacts by (1) determining the source of the Coarse Refuse Seep and attempting to intercept the flow before it contacts the refuse material or (2) implementing a more effective means of treating the discharge. NOV #N92-32-14-1 was issued on November 11, 1992 for "Failure to comply with the terms and agreements of the approved mining and reclamation permit. Failure to treat the water emanating from the bottom of the wash below the coarse refuse pile (Sampling Point CRS) by the addition of flocculent to reduce the iron content." As of this writing, the Division of Water Quality, Department of Environmental Quality, has noted that a request for a permit modification (UT0022942) (regarding this issue) had been made by Sunnyside Coal Company but not resolved to date.

Sunnyside Cogeneration Associates will attempt through the use of dyes placed in the East Slurry Cell or other studies to track the flow of water from the East Slurry Cell to the Coarse Refuse Seep. If a connection is determined, then remedial action

will be taken, such as discontinuing the use of the East Slurry Cell. Flocculant had been added to the seep to precipitate Iron, but is not being added currently and according to DWQ shouldn't be treated in the stream.

The applicant has committed to monitor this seep at the point of emergence for baseline data. Sediment controls are currently in place, so any future impacts associated with suspended solids are not anticipated.

Water Canyon and Fan Canyon empty into the Icelander Drainage after they combine to form Water Canyon. Sunnyside Mining Company's #005 NPDES mine water discharge point is located in Water Canyon. The discharge pipe is currently buried under sediment in the steam channel and is not presently used. The last discharge from the #2 Mine was February 24, 1982. Water Canyon and Fan Canyon have sediment controls in place and only flow in response to major rainfall events. Mine water discharged from the #005 point does not reach Water Canyon due to infiltration along the stream bottom and the quantity of mine water discharge (Doug Pearce, personal communication, May 1985). Thus, future impacts are not anticipated.

C. Alluvial Valley Floors

1. Sunnyside Coal Company

The Utah Supreme Court review of Joseph R. Sharp vs. George C. Whitmore (Decree #3028) indicated the premining flow regime for Grassy Trail Creek was intermittent during most years. Since the addition of mine discharge and construction of Grassy Trail reservoir, flow has been exclusively perennial.

At present, mine discharge accounts for 23 percent of the average annual flow in Grassy Trail Creek. Accordingly, this proportion would decrease during spring runoff and increase during periods of low flow in the late summer and fall.

Agricultural activities associated with the designated AVF currently benefit from the additional surface flow generated by mining activities. It is anticipated that this relationship will continue until the cessation of mining. At that time, discharge pumping will be discontinued and surface flow will be reduced. As indicated earlier, mine flooding will begin and continue until flow through the rocks is initiated. Conceivably, a ground-water regime similar to that which existed prior to mining will eventually reestablish.

2. **Sunnyside Cogeneration Associates**

Although the coarse refuse pile and slurry ponds associated with the SCA permit area are located on the alluvial fan, they are more isolated from the Grassy Trail Creek alluvial valley floor. The refuse pile historically has been placed in several small drainage channels. As excavation and consumption continue throughout the life of the project, the existing natural channels will be uncovered and reclaimed.

VII. Summary

The probable hydrologic impacts are summarized below under the headings entitled First Five Year Permit Term and Future Mining.

A. First Five Year Permit Term

1. **Sunnyside Coal Company**

The rate of dewatering will remain significantly less than the estimated recharge rate during the first five year permit term. Moreover, overburden thickness will be sufficient (1,500-2,000 feet) to restrict surface manifestations of subsidence. The subsurface propagation of fractures may produce changes in ground-water flow that could affect localized aquifers and springs. Future monitoring will provide data applicable to documenting changes in the ground-water system.

Surface disturbance and the addition of mine water have degraded water quality in Grassy Trail Creek and Icelander Creek. Sediment control measures have served to reduce contaminants and stabilize water quality at acceptable levels.

The AVF will be positively impacted during the first five year permit term by additional flow from increased mine water discharge.

2. **Sunnyside Cogeneration Associates**

The first five year permit term will probably not see big improvements in the configuration of the refuse pile and slurry ponds in relation to the natural channels. The projected use of the coarse refuse and slurry pond fines combined is proposed at 410,000 tons per year. The first permit term proposes that approximately 1,591,788 tons of coarse refuse material and 458,212 tons of slurry pond fines will be excavated, removed and burned. This equals 22 percent of the total estimated quantity of material available in the refuse pile and slurry ponds.

B. Future Mining

1. **Sunnyside Coal Company**

Increased rates of dewatering may, in the future, result in depletion of ground-water storage. Depletion of storage may terminate certain spring flow and base flow recharge to streams. Upon cessation of mining, mine water discharge to Grassy Trail Creek will be discontinued. However, this affect is considered temporary because mine flooding will probably result in reestablishment of the preexisting ground-water system that, most likely, provided base flow recharge to Grassy Trail Creek.

Drainage from future surface disturbance will be managed through appropriate sediment controls. Future mine discharge will be directed through existing sediment ponds.

At the termination of mining, the AVF will experience decreased flow. The duration and extent of this impact cannot be accurately assessed at this time. However, flow rates may be partially to fully restored when the ground-water system is reestablished.

The operational design proposed for the Sunnyside Mines is herein determined to be consistent with preventing damage to the hydrologic balance outside the mine plan area.

2. **Sunnyside Cogeneration Associates**

Assuming that projected combustion rates provided in the application are accurate, then approximately 22 percent of the amount available will be consumed in the first permit term. This provides enough quantities of material to fuel the plant for 4.5 permit terms or 23 years. Considering that refuse from the active Sunnyside Mine will also be incorporated into this project and that it is anticipated that Sunnyside Mines will produce 264,000 tons per year (64 percent of amount consumed), then the existing combustible amounts plus that produced by the active Sunnyside Mines would increase the life of the operation by about 40 years.

Non-combustible waste from this operation will be disposed of in areas within the permit area. These areas will not include head of hollow fills. The final configuration and restoration of the natural drainages will be completed near the end of the project as the material is removed and areas are exposed.

The nature of the Sunnyside Cogeneration Facility is such that no underground mining will occur in the permit area. The only mining will consist of removal of the refuse and slurry materials. Sediment ponds exist within the permit area to control storm water runoff and reduce sediment loads offsite.

The consumption of the refuse pile and slurry ponds will over time eliminate the seep at the toe of the refuse pile. This should increase water quality in Icelander Creek by eliminating a potential source of water pollution. The operational design proposed for the Sunnyside Cogeneration facility is herein determined to be consistent with preventing damage to the hydrologic balance outside the permit area.

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PUBLISHED ON OCT 31 NOV 07 14 21 1992

SIGNATURE Joanne Mowry

DATE 11/21/92

NOTICE OF APPLICATION FILING

Notice is hereby given that Sunnyside Cogeneration Associates, of Sunnyside Cogeneration Associates, Attention: David Pearce, P.O. Box 58087, Salt Lake City, Utah 84158-0087 or Sunnyside Cogeneration Associates, c/o Environmental Power Corporation, 200 State Street, 13th Floor, Boston, Massachusetts 02129, has submitted an application to the State of Utah, Department of Natural Resources, Division of Oil, Gas and Mining, seeking a Permanent Program Permit (PRO/007/035) under the provisions of the Utah Coal Mining and Reclamation Act (Utah Code Ann. 40-10-1, et seq.) and the Utah Coal Mining Rule R645 to use the coarse refuse pile at the Sunnyside Mine.

The permit area is located in Carbon County, Utah as follows:

PARCEL B: Describing a parcel of land located in Carbon County, Utah, which is located in the east half of Section 6, Township 15 South, Range 14 East, Salt Lake Base and Meridian and being more particularly described according to the following courses and distances, to wit:

Beginning at the East one quarter corner of Section 6, Township 15 South, Range 14 East, Salt Lake Base and Meridian; and running thence S 0 degrees 13'39" W, 1818.48 feet along the east section line of Section 6 to the south right of way line of an existing railroad track; thence northwesterly along a curve to the right with a radius of 450.00 feet, through an angle of 83 degrees 37'47", for a distance of 656.83 feet having a chord that bears N 40 degrees 21'18" W, 600.05 feet; thence N 1 degrees 21'36" E, 68.00 feet along the westerly right of way line of an existing railroad track; thence S 57 degrees 11'02" W, 338.86 feet to an existing 5/8 in rebar; thence S 66 degrees 14'45" W, 220.17 feet to an existing 5/8 inch rebar; thence S 86 degrees 11'30" W, 261.34 feet to a metal fence post; thence N 4 degrees 41'13" W, 264.09 feet to a roof bolt on the west side of a gate in a fence line; thence N 10 degrees 54'48" W, 189.49 feet to a metal fence post; thence N 0 degrees 39'10" W, 254.39 feet to a metal fence post; thence N 10 degrees 09'48" W, 315.48 feet to a metal fence post; thence N 6 degrees 32'57" W, 232.70 feet to a roof bolt in an existing fence line; thence N 6 degrees 32'57" W, 65.24 feet to the south right of way line of a Denver and Rio Grande Railroad as described in a certain deed dated July 29, 1912, thence N 71 degrees 27'00" E, 1209.07 feet along the south line of a 50 foot wide right of way for the Denver and Rio Grande Railroad; thence northeasterly along a curve to the left with a radius of 979.93 feet, through an angle of 9 degrees 19'48", for a distance of 159.57 feet, having a chord that bears N 66 degrees 47'06" E, 159.40 feet to the east line of said Section 6; thence S 0 degrees 13'39" W, 174.12 feet along the east line of Section 6, to the point of beginning.

Containing 42.316 acres more or less.

PARCEL C: Describing a parcel of land located in Carbon County, Utah, which is located in the south half of Section 6, Township 15 South, Range 14 East, Salt Lake Base and Meridian, and being more particularly described according to the following courses and distances, to wit:

Beginning at the southeast corner of Section 6, Township 15 South, Range 14 East, Salt Lake Base and Meridian which is a brass cap; and running thence N 89 degrees 57'59" W, 2646.97 feet along the south line of said Section 6 to the south one-quarter corner of said Section 6; thence S 89 degrees 27'59" W, 1321.87 feet along the south line of said Section 6 to the southwest corner of the SE1/4SW1/4 of said Section 5; thence N 59 degrees 40'32" E, 666.58 feet to a metal fence post; thence N 44 degrees 13'50" E, 430.53 feet to a roof bolt; thence N 59 degrees 09'24" E, 167.86 feet to a metal fence post; thence N 63 degrees 51'14" E, 188.19 feet to a metal fence post; thence N 60 degrees 15'43" E, 335.60 feet to a metal fence post; thence N 21 degrees 00'31" W, 34.15 feet to an east brace post in a barbed wire fence; thence N 81 degrees 18'59" E, 1270.98 feet along an existing fence line to a roof bolt; thence N 36 degrees 40'17" E, 152.88 feet along a fence line to a roof bolt; thence S 4 degrees 41'13" E, 264.09 feet to a

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I, Dan Stockburger, on oath, say that I am the Publisher of the Sun Advocate, a twice-weekly newspaper of general circulation, published at Price, State and County aforesaid, and that a certain notice, a true copy of which is hereto attached, was published in the full issue of such newspaper for Four (4) consecutive issues, and that the first publication was on the

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Subscribed and sworn to before me this

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Notice is here by given that Sunnyside Cogeneration Associates, of
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Attention: David Pearce
P.O. Box 58087
Salt Lake City, Utah 84158-0087
OR
Sunnyside Cogeneration Associates
c/o Environmental Power Corporation
200 State Street, 13th Floor
Boston, Massachusetts 02129

has submitted an application to the State of Utah, Department of Natural Resources, Division of Oil, Gas and Mining, seeking a Permanent Program Permit (PRO/007/035) under the provisions of the Utah Coal Mining and Reclamation Act (Utah Code Ann. 40-10-1, et seq.) and the Utah Coal Mining Rule R645 to use the course refuse pile at the Sunnyside Mine.

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PARCEL C:

Describing a parcel of land located in Carbon County, Utah, which is located in the south half of Section 6, Township 15 South, Range 14 East, Salt Lake Base and Meridian, and being more particularly described according to the following courses and distances, to-wit:

Beginning at the southeast corner of Section 6, Township 15 South, Range 14 East, Salt Lake Base and Meridian which is a brass cap; and running thence N 89°57'59" W, 2646.97 feet along the south line of said Section 6 to the south one-quarter corner of said Section 6; thence S 89°27'59" W, 1321.87 feet along the south line of said Section 6 to the southwest corner of the SE1/4SW1/4 of said Section 5; thence N 59°40'32" E, 666.58 feet to a metal fence post; thence N 44°13'50" E, 430.53 feet to a roof bolt; thence N 59°09'24" E, 167.86 feet to a metal fence post; thence N 63°51'14" E, 188.19 feet to a metal fence post; thence N 60°15'43" E, 335.60 feet to a metal fence post; thence N 21°00'31" W, 34.15 feet to an east brace post in a barbed wire fence; thence N 81°18'59" E, 1270.98 feet along an existing fence line to a roof bolt; thence N 36°40'17" E, 152.88 feet along a fence line to a roof bolt; thence S 4°41'13" E, 264.09 feet to a metal fence post; thence N 86°11'30" E, 261.34 feet to an existing 5/8 inch on the south line of the north one half of the south one half of the northwest one quarter of said Section 7.

Containing 9.318 acres, more or less.

Written Comments: A copy of the Permit Application can be found at the Carbon County Recorders offices of the Division of Oil, Gas and Mining (address below). Pursuant to R645-300-122, any person having an interest which is or may be adversely affected by a decision for this permit, including an official of any federal, state, or local government agency, may submit written comments on the Application to the Division, within 30 days of the date of this advertisement, at the following address:

DIVISION OF OIL, GAS AND MINING
Attn: Dianne R. Nielson, Director
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Published in the Sun Advocate October 29, November 5, 12 and 19, 1992.

Permit Number: ACT/007/035
Date Original Permit Issued: FEB. 4, 1993
Effective Date of Agreement: FEB. 4, 1993

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
(801) 538-5340

COAL RECLAMATION AGREEMENT
--ooOOoo--

For the purposes of this RECLAMATION AGREEMENT the terms below are defined as follows:

"PERMIT": (Mine Permit No.) pg ACT/007/035 (County) CARBON

"MINE": (Name of Mine) pg Sunnyside Refuse and Slurry

"OPERATOR": SUNNYSIDE COGENERATION ASSOCIATES

"PERMITTEE": (Company or Name) SUNNYSIDE COGENERATION ASSOCIATES
(Address) P.O. BOX 58087
SLC, UT. 84158-0087

"PERMITTEE'S REGISTERED AGENT": (Name) CALLISTER, DUNCAN & NEBEKER
(Address) SUITE 800 KENNECOTT BLDG
(Phone) SALT LAKE CITY, UTAH 84133
(801) 530-7300

"COMPANY OFFICERS": SEE APPLICATION

"BOND TYPE": (Form of Bond) LETTER OF CREDIT
"BOND": (Bond Amount-Dollars) $ 1,500,000.00
(Escalated Year-Dollars)
"INSTITUTION": (Bank or Agency) FIRST SECURITY BANK
"POLICY OR ACCOUNT NUMBER": S-09742-00018
"LIABILITY INSURANCE": (Exp.) APRIL 1, 1993
(Insurance Company) Chubb Ins. Co.

"STATE": Utah (Department of Natural Resources)
"DIVISION": Division of Oil, Gas and Mining
"DIVISION DIRECTOR": ~~Dianne R. Nielson~~ LOWELL BRAXTON
(ACT NSA) 2/4/93

EXHIBITS:

		Revision Dates		
"PERMIT AREA"	Exhibit "A"			
"BONDING AGREEMENT"	Exhibit "B"			
"LIABILITY INSURANCE"	Exhibit "C"			
"STIPULATION TO CHANGE BOND"	Exhibit "D"			

Permit Number PRO/007/035
ACT

RECLAMATION AGREEMENT

This RECLAMATION AGREEMENT, hereinafter "AGREEMENT", is entered into by the Permittee.

WHEREAS, on February 4, 1993 (1992) (Date of Permit Approval), the Division of Oil, Gas and Mining approved the Permit Application Package, hereinafter "PAP", submitted by SUNNYSIDE COGENERATION ASSOCIATES, hereinafter "PERMITTEE"; and

WHEREAS, the PAP, as amended or revised in conjunction with the Act and the Rules, constitutes the approved plan for reclamation of the Surface Disturbance; and

WHEREAS, in the conduct of reclamation operations within the Permit Area described in the PAP, the Permittee is obligated by Title 40-10-1, et seq., Utah Code Annotated (1953, as amended), hereinafter "Act", to file and maintain with the Division a bond ensuring the performance of the reclamation obligations in the manner and by the standards set forth in the PAP, the Act, and the State of Utah Division of Oil, Gas and Mining Rules pertaining to Coal Mining and Reclamation Activities, hereinafter "Rules"; and

WHEREAS, the Permittee is ready and willing to file the bond in the amount and in a form acceptable to the Division and to perform all obligations imposed by the Division pursuant to applicable laws & regulations relating to the reclamation within the Permit Area.

NOW, THEREFORE, the Division and the Permittee agree as follows:

1. The provisions of the Act and the Rules are incorporated by reference herein and hereby made a part of this Agreement. Provisions of the Act or Rules shall supersede conflicting provisions of this Agreement.

2. The Permittee agrees to comply with all terms and provisions of the PAP, the Act and the Rules, including the reclamation of all areas disturbed by surface coal mining and reclamation operations despite the eventuality that the cost of actual reclamation exceeds the bond amount.

3. The Permittee agrees to provide a legal description of the Permit Area including the number of acres approved by the Division to be disturbed by surface mining and reclamation operations within the Permit Area. The description is attached as Exhibit "A", and is incorporated by reference and shall be referred to as the "Permit Area".

4. The Permittee agrees to provide a bond to the Division in the form and amount acceptable to the Division ensuring the performance of the reclamation obligations in the manner and by the standards set forth in the PAP, the Act and the Rules. Said bond is attached as Exhibit "B" and is incorporated by reference.

5. The Permittee agrees to maintain in full force and effect the public liability insurance policy submitted as part of the permit application. The Division shall be listed as an additional insured on said policy.

6. In the event that the Surface Disturbance is increased through expansion of the coal mining and reclamation operations or decreased through partial reclamation, the Division shall adjust the bond as appropriate.

7. The Permittee does hereby agree to indemnify and hold harmless the State of Utah and the Division from any claim, demand, liability, cost, charge, or suit initiated by a third party as a result of the Permittee or Permittee's agent or employees failure to abide by the terms and conditions of the approved PAP and this Agreement.

8. The terms and conditions of this Agreement are non-cancelable until such time as the Permittee has satisfactorily, as determined by the Division, reclaimed the Surface Disturbance in accordance with the approved PAP, the Act, and the Rules. Notwithstanding the above, the Division may direct, or the Permittee may request and the Division may approve, a written modification to this Agreement.

9. The Permittee may, at any time, submit a request to the Division to substitute the bonding method. The Division may approve the substitution if the bond meets the requirements of the Act and the Rules, but no bond shall be released until the Division has approved and accepted the replacement bond.

10. Any revision in the Surface Disturbance, the bond amount, the bond type, the liability insurance amount coverage, and/or the liability insurance company, or other revisions affecting the terms and conditions of this Agreement shall be submitted on the form entitled "Stipulation to Revise Reclamation Agreement" and shall be attached hereto as Exhibit "D" (other exhibits as appropriate).

11. This Agreement shall be governed and construed in accordance with the laws of the state of Utah. The Permittee shall be liable for all reasonable costs incurred by the Division to enforce this agreement.

12. Any breach of the provisions of this Agreement, the Act, the Rules, or the PAP may, at the discretion of the Division, result in an order to cease coal mining and reclamation operations, revocation of the Permittee's permit to conduct coal mining and reclamation operations and/or forfeiture of the bond.

13. In the event of forfeiture, the Permittee agrees to be liable for additional costs in excess of the bond amount which may be incurred by the Division in order to comply with the PAP, the Act, and the Rules. Any excess monies resulting from the forfeiture of the bond amount upon compliance with this contract shall be refunded to the appropriate party.

14. Each signatory below represents that he/she is authorized to execute this Agreement on behalf of the named party. Proof of such authorization is provided on a form acceptable to the Division and is attached hereto.

SO AGREED this 25th day of JANUARY, 1993

STATE OF UTAH:

Lowell P Braxton

LOWELL P. BRAXTON, ACTING DIRECTOR
Division of Oil, Gas and Mining

PERMITTEE:

R. K

Company Officer - Position
TREASURER OF JOINT VENTURE CORPORATIONS:
KAISER POWER of Sunnyside, Inc
KAISER Systems, Inc.

Company Officer - Position

NOTE: An **Affidavit of Qualification** must be completed and attached to this form for each authorized agent or officer. Where one signs by virtue of Power of Attorney for a company, such Power of Attorney must be filed with this Agreement. If the Principal is a corporation, the Agreement shall be executed by its duly authorized officer.

AFFIDAVIT OF QUALIFICATION
PERMITTEE
--ooOOoo--

I, BAYARD R. KRAFT III, being first duly sworn under oath, deposes and says that he/she is the (officer or agent) TREASURER of KAISER POWER OF SUNNYSIDE, INC and KAISER SYSTEMS, INC.; and that he/she is duly authorized to execute and deliver the foregoing obligations; and that said PERMITTEE is authorized to execute the same and has complied in all respects with the laws of Utah in reference to commitments, undertakings and obligations herein.

(Signed) B. R. K. III
TREASURER OF Joint Venture Corporations FOR SUNNYSIDE COGENERATION ASSOCIATES
Name - Position

Subscribed and sworn to before me this 25 day of January, 1993.

Notary Public

My Commission Expires:

February 10, 1995.

Attest:

STATE OF Vermont)
) ss:
COUNTY OF Bennington)

Permit Number: PRO/007/035

CERTIFICATE OF LIABILITY INSURANCE

Issued To:
State of Utah
Department of Natural Resources
Division of Oil, Gas and Mining
--ooOOoo--

THIS IS TO CERTIFY THAT:

Chubb Group of Insurance Companies
(Name of Insurance Company)

15 Mountain View Road, Warren, NJ
(Home Office Address of Insurance Company)

HAS ISSUED TO:

Sunnyside Cogeneration Associates
(Name of Permittee)

Sunnyside Mine	N/A
(Mine Name)	(Permit Number)

CERTIFICATE OF INSURANCE:

3710-13-49	April 1, 1991
(Policy Number)	(Effective Date)

UNDER THE FOLLOWING TERMS AND CONDITIONS:

Per R645-301-890 Terms and Conditions for Liability Insurance:

A. The DIVISION shall require the PERMITTEE to submit as part of its permit application a certificate issued by an insurance company authorized to do business in the state of Utah certifying that the applicant has a public liability insurance policy in force for the surface coal mining and reclamation operations for which the permit is sought. Such policy shall provide for personal injury and property damage protection in an amount adequate to compensate any persons injured or property damaged as a result of the surface coal mining and reclamation operations, including the use of explosives and who are entitled to compensation under the applicable provisions of state law. Minimum insurance coverage for bodily injury and property damage shall be $300,000 for each occurrence and $500,000 aggregate.

B. The policy shall be maintained in full force during the life of the permit or any renewal thereof, including the liability period necessary to complete all reclamation operations under this chapter.

C. The policy shall include a rider requiring that the insurer notify the Division whenever substantive changes are made in the policy including any termination or failure to renew.

IN ACCORDANCE WITH THE ABOVE TERMS AND CONDITIONS, and the Utah Code Annotated 40-10-1 et seq., the Insurance Company hereby attests to the fact that coverage for said Permit Application is in accordance with the requirements of the State of Utah and agrees to notify the Division of Oil, Gas and Mining in writing of any substantive change, including cancellation, failure to renew, or other material change. No change shall be effective until at least thirty (30) days after such notice is received by the Division. Any change unauthorized by the Division is considered breach of the RECLAMATION AGREEMENT and the Division may pursue remedies thereunder.

UNDERWRITING AGENT:

Michael J. Hurley	(617) 861-3808
(Agent's Name)	(Phone)
Hobbs Group, Inc.	
(Company Name)	
420 Bedford Street	Lexington, MA 02173-1501
(Mailing Address)	(City, State, Zip Code)

The undersigned affirms that the above information is true and complete to the best of his/her knowledge and belief, and that he/she is an authorized representative of the above-named insurance company. (An Affidavit of Qualification must be completed and attached to this form for each authorized agent or officer.)

22 January '93 Michael J. Hurley, Marketing Executive
(Date, Signature and Title of Authorized Agent of Insurance Company)

Signed and sworn before me by Carole A. Carr

this 22 day of January, 19 93.

Carole A. Carr
(Signature)

My Commission Expires: 5/2/97

AFFIDAVIT OF QUALIFICATION
INSTITUTION (Bank or Agency)
--ooOOoo--

I, Michael J. Nikolai, being first duly sworn under oath, deposes and says that he/~~she~~ is the (~~officer or~~ agent) Agent of Chubb Group / Federal Insurance Co.; and that he/she is duly authorized to execute and deliver the foregoing obligations; and that said INSTITUTION (~~Bank~~ or Agency) is authorized to execute the same and has complied in all respects with the laws of Utah in reference to commitments, undertakings and obligations herein.

(Signed) Michael J. Nikolai, Marketing Executive
Name - Position

Subscribed and sworn to before me this 22nd day of January, 1993.

Carol G. Carr
Notary Public

My Commission Expires:
5/2, 1997

Attest:

STATE OF Massachusetts)
) ss:
COUNTY OF Middlesex)

First Security Bank

IRREVOCABLE STANDBY LETTER OF CREDIT NO. S-09742-00018

ISSUED IN Salt Lake City, Utah on 22 JAN 1993

APPLICANT:
Sunnyside Cogeneration Associates
P.O. Box 45
109 Union Street
Manchester, Vermont 05254

BENEFICIARY:
State of Utah
Division of Oil, Gas and Mining
355 West North Temple, Ste. 350
Salt Lake City, Utah 84180-1203

AMOUNT: USD ***1,500,000.00
ONE MILLION FIVE HUNDRED THOUSAND
AND 00/100 UNITED STATES DOLLARS

DATE AND PLACE OF EXPIRY:
21 JAN 1994
Our Counters

PERMITTEE: SUNNYSIDE COGENERATION ASSOCIATION
PERMIT NUMBER: PRO/007/035

Ladies and Gentlemen:

We hereby establish our Irrevocable Letter of Credit in your favor and agree to pay to the Division of Oil, Gas and Mining (DIVISION), available by your draft(s) drawn on us, in an amount not to exceed ($1,500,000.00), upon receipt of a written demand by the DIVISION which reads as follows:

"We certify that Sunnyside Cogeneration Associates has failed to conduct appropriate reclamation activities or the terms of the permit have not been met, and that the State of Utah, Division of Oil, Gas and Mining will therefore use the funds as necessary to complete the reclamation activities on the mining property located in Carbon County, Sunnyside, Utah."

This Letter of Credit is effective January 22, 1993 and will expire at the close of business on January 21, 1994; however, this credit will automatically be extended for periods of one year from any scheduled expiration date (as originally scheduled or automatically extended) unless at least ninety (90) days prior to such date we notify the Division Director in writing by certified mail, return receipt requested, that we elect not to renew this Letter of Credit for such additional period.

Upon receipt by you of such notice, you may draw on us at sight for the amount of this Letter of Credit beginning 30 days or less prior to the then applicable expiration date, accompanied by a statement signed by the Division Director, certifying that the amount of the drawing represents funds due the Division because the permittee has failed to replace this Letter of

First Security Bank

Credit with other suitable bond pursuant to R645-301-860.22 and R645-301-870.

We certify that the amount of the credit herein established will not be reduced for any reason during the period of this instrument without the written consent of the DIVISION.

We will give prompt notice to the permittee and to the Division Director of any notice received or action filed alleging the insolvency or bankruptcy of the Bank, or alleging any violations of regulatory requirements which could result in suspension or revocation of the Bank's charter or license to do business.

In the event the Bank becomes unable to fulfill our obligations under this Letter of Credit for any reason, notice shall be given immediately to the permitee and to the Division Director.

Except so far as otherwise expressly stated, this credit is subject to the Uniform Customs and Practice for Documentary Credits (1983 Revision) International Chamber of Commerce Publication No. 400.

In Witness Whereof, the Bank has herunto set its signature and seal this 22nd day of January, 1993.

We hereby agree to honor each draft drawn under and in compliance with the terms of this credit, if duly presented (together with the documents as specified) at our office on or before the expiry date of this credit.

Rita A M Vaughn

AUTHORIZED SIGNATURE(S)

First Security Bank

AMENDMENT TO STANDBY LETTER OF CREDIT

L/C #: S-09742-00018
LC ISSUED: 1/22/93
AMENDMENT 1

AMENDMENT DATE: 28 JAN 1993

APPLICANT:
Sunnyside Cogeneration Associates
P.O. Box 45
109 Union Street
Manchester, Vermont 05254

BENEFICIARY:
State of Utah
Division of Oil, Gas and Mining
355 West North Temple, Ste. 350
Salt Lake City, Utah 84180-1203

THE ABOVE MENTIONED LETTER OF CREDIT IS HEREBY AMENDED AS FOLLOWS:

APPLICANT'S ADDRESS IS NOW TO READ: P.O. BOX 58087, SALT LAKE CITY, UTAH 84158-0087

THIS AMENDMENT IS TO BE CONSIDERED AS PART OF THE ABOVE MENTIONED CREDIT AND MUST BE ATTACHED THERETO. ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

Maryee Bingham
AUTHORIZED SIGNATURE(S)

AFFIDAVIT OF QUALIFICATION
INSTITUTION (Bank or Agency)
--ooOOoo--

I, Marylee Bingham, being first duly sworn under oath, deposes and says that he/she is the (officer or agent) International Banking Officer of First Security Bank of Utah, N.A.; and that he/she is duly authorized to execute and deliver the foregoing obligations; and that said INSTITUTION (Bank or Agency) is authorized to execute the same and has complied in all respects with the laws of Utah in reference to commitments, undertakings and obligations herein.

(Signed) Marylee Bingham

Name - Position

Marylee Bingham, International Banking Officer

Subscribed and sworn to before me this 28 day of January, 1993.

Scott M Eastwood

Notary Public

My Commission Expires:

_____, 19 ____.

Attest:

STATE OF _____)
) ss:
COUNTY OF _____)

AFFIDAVIT OF QUALIFICATION
ACTING DIRECTOR
--ooOOoo--

Lowell P. Braxton, being first duly sworn under oath, deposes and says that he is the Acting Director of the Division of Oil, Gas and Mining, Department of Natural Resources, State of Utah; and that he is duly authorized to execute and deliver the foregoing obligations; and that said ACTING DIRECTOR is authorized to execute the same by authority of law on behalf of the State of Utah.

(Signed) Lowell P Braxton
Lowell P. Braxton, Acting Director
Division of Oil, Gas and Mining

Subscribed and sworn to before me this 11th day of February, 19 93.

NOTARY PUBLIC
JANICE L. BROWN
241 East 9545 South
Sandy, UT 84070
My Commission Expires
August 3, 1994
STATE OF UTAH

Janice L. Brown
Notary Public

My Commission Expires:
August 3, 19 94.

Attest:

STATE OF UTAH)
) ss:
COUNTY OF SALT LAKE)

Norman H. Bangerter
Governor
Dee C. Hansen
Executive Director
Dianne R. Nielson, Ph.D.
Division Director

State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

February 4, 1993

TO: Pamela Grubaugh-Littig, Permit Supervisor

FROM: Joseph C. Helfrich, Regulatory Program Coordinator JBH for

RE: Compliance Review for Section 510(c) Findings, Sunnyside Cogeneration Associates, Sunnyside Coarse Refuse, ACT/007/035, Folder #5, Carbon County, Utah

As of the writing of this letter, there are no NOV's or CO's which are not corrected or in the process of being corrected. Any NOV's or CO's that are outstanding are in the process of administrative or judicial review. There are no finalized Civil Penalties which are outstanding and overdue in the name of Sunnyside Cogeneration Associates.

Finally, they do not have a demonstrated pattern of willful violations, nor have they been subject to any bond forfeitures for any operation in the state of Utah.

jbe
A:\510(C)

DATE: 04 FEB 93 APPLICANT VIOLATOR SYSTEM TIME: 13:13:33
APPLICATION EVALUATION REPORT

STATE: UT APPNO: SEQNO: PAGE: 1
APPLICANT'S ENTITY ID: 128991
APPLICANT'S NAME : SUNNYSIDE COGENERATION ASSOCIATES

SYSTEM RECOMMENDATION IS BASED ON ENTITY OFT

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**********************************************************
*                                                        *
*  SYSTEM RECOMMENDATION          :      ISSUE           *
*  PREVIOUS SYSTEM RECOMMENDATION:                       *
*                                                        *
*                                                        *
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F2/PROCEED F3/QUIT F4/MAIN F6/REPORT F9/V.VIOL F10/V.OFT

cc [illegible] Orig. File

United States Department of the Interior

TAKE PRIDE IN AMERICA

OFFICE OF SURFACE MINING
Reclamation and Enforcement
Brooks Towers
1020 15th Street
Denver, Colorado 80202

January 22, 1993

RECEIVED
JAN 2 5 1993
DIVISION OF OIL GAS & MINING

MEMORANDUM

TO: State Supervisor
Fish and Wildlife Enhancement
Salt Lake City, Utah

FROM: Chief, Federal Lands Branch
Office of Surface Mining
Denver, Colorado

SUBJECT: Request for initiation of formal Section 7 consultation for the Sunnyside Cogeneration Project, Carbon County, Utah

The Office of Surface Mining Reclamation and Enforcement (OSM) has reviewed your December 22, 1992 request to enter formal consultation under Section 7 of the Endangered Species Act for the above referenced project. The Utah Division of Oil, Gas and Mining will issue the permit for the "mining" of the coal fines in the slurry ponds under the permanent State program. The permit area for the proposed mining operation is not on Federal lands (i.e., lands in which the Federal government has a surface or mineral ownership interest), therefore the State's permitting action is not subject to the requirements of the State-Federal Cooperative Agreement. Since OSM takes no action on a permit application (and there is no mining plan approval required under the Mineral Leasing Act), there is no Federal action; therefore, there is no OSM Section 7 responsibility. I have attached for your review a copy of the Southwest Regional Solicitor's Opinion which addresses this issue.

The "mining" operation to be permitted will cause little or no depletion of surface water; however, the cogeneration power plant will substantially deplete surface flows. As we discussed with Susan Linner on January 19, 1993, if the power plant or its support facilities are located on federally-owned surface, Section 7 consultation could be reinitiated for the Federal action that authorized the use of those Federal lands.

If you have any questions or wish to discuss the issue further, please call Richard Holbrook, (303) 844-2896 or me at (303) 844-2400.

Ranvir Singh
Ranvir Singh

cc: Albuquerque Field Office
Utah Division of Oil Gas & Mining

State of Utah
Department of Community & Economic Development
Division of State History
Utah State Historical Society

Norman H. Bangerter
Governor
Max J. Evans
Director

300 Rio Grande
Salt Lake City, Utah 84101-1182
(801) 533-5755
FAX: (801) 364-6436

October 23, 1992

Alane E. Boyd, P.E.
Eckoff, Watson and Preator Engineering
1121 East 3900 South, Suite C 100
Salt Lake City, Utah 84124-1214

RE: Coal Mine Permit, Sunnyside Mines, T15S, R14E, Sections 6 and 7

In Reply Please Refer to Case No. 92-0459

Dear Ms. Boyd:

The Utah State Historic Preservation Office received the above referenced report on October 23, 1992.

After review of the October 19th letter and attached permit application, the Utah Preservation Office notes that only 42CB325 has the potential to be effected. After discussing the report, with Jessica Smith of Eckoff, Watson and Preator, our office makes a recommendation to DOGM that there will be **No Effect** if 42CB325 can be avoided as planed. One technical note in review of the permit.

1. Under 411.142-144, the plans for protection of the site need to be explained.

This information is provided on request to assist with Section 106 responsibilities as specified in 36CFR800. If you have questions or need additional assistance, please contact me at (801) 533-7039.

Sincerely,

James L. Dykman
Regulation Assistance Coordinator

JLD:92-0459